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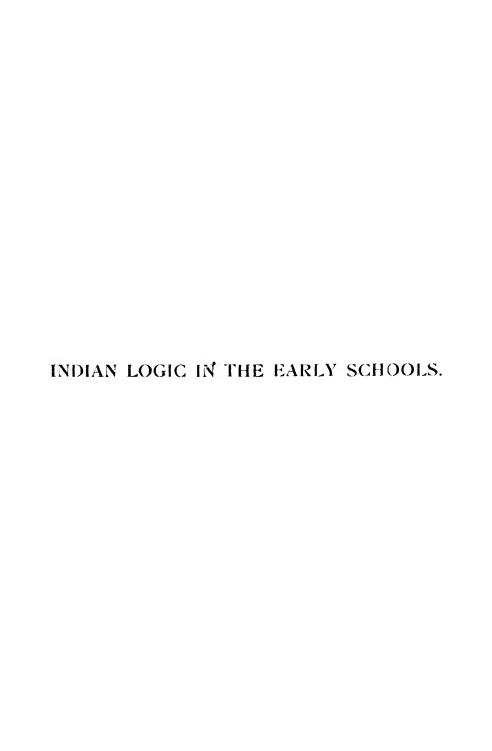
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A STUDY OF THE NYĀYADARŚANA

IN ITS RELATION TO THE EARLY

LOGIC OF OTHER SCHOOLS

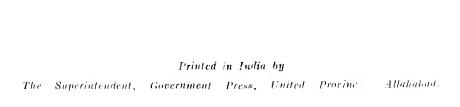
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• Καινόν γε τουτο. λαμπάδια 'έχοντες διαδώσουσιν άλλήλοις Τάμιλλώμενοι...'άξιον θεάσασθαι... Κὰι ξυνεσόμεθά τε πολλοις κὰι διαλεξόμεθα. ἀλλὰ μένετε.

- Plato, Resp., 328A.

PREFACE

THE present work is a dissertation approved by the University of Oxford for the degree of Doctor of Philosophy. It is narrower in its scope than Keith's Indian Logic and Atomism, in that it is specifically a study of Indian Logic (including epistemology), and does not, unless incidentally, deal with the physics and metaphysics of the Nyāya and Vaišesika schools. It is narrower also in that it does not include an account of the later, or so-called 'modern' logic, but confines its survey to the period ending with Vācaspati Miśra's commentary in the middle of the ninth century *D.

My intention was not to give a history of Indian Logic within this period, but to interpret Indian logical doctrine in its historical development. In view of the difficulty of interpreting the basic texts it seemed necessary to keep closely to the actual words of the writers; with the result that the exposition became very largely a string of translations of loci classici on logical topics.

References are made by page and line to the Vizianagram Sanskrit Series edition of the Nyāyabhāsya (Benares 1896): the Bibliotheca Indica edition of the Nyāyavārtika (Calcutta 1907): the Vizianagram Sanskrit Series edition of the Nyāyavārtikatātparyatīkā (Benares 1898): the Bibliotheca Indica edition of Sabara's Bhāṣya on the Mīmāmsā (Calcutta 1889): and the Vizianagram Sanskrit Series edition of Praśastapāda's Bhāṣya on the Vaiśeṣika, and Srīdhara's Nyāyakandalī (Benares 1895). References to Kumārila's Ślokavārtika and Pārthasārathi Miśra's Nyāyaratnākara are to the section and verse, the edition used being the Chowkhamba Sanskrit Series edition (Benares, 1898-1899).

viii PREFACE

Some of these are pioneer editions, landmarks in bibliography. Within the space of ten years India rediscovered the logical classics of the ancient school, which before that were practically unknown, even in India itself, and among pandits. All students of the Nyāya we a very great debt to the distinguished Indian editors of these first editions; and to those European Sanskritists who realised the importance of getting the manuscripts edited. To the last of these latter, the late A thur Venis, I am under a personal debt of discipleship which I cannot now repay. Prīyantāni guravaḥ.

The conditions of the possibility of this study have been principally provided by three writers on Nyāya: Dr. Gangānātha Jhā, Professor Keith, and the late Satis Candra Vidyābhūṣaṇa. Without Dr. Jhā's translation of the three basic works of the ancient Nyāya, I should probably never have begun to understand them. To Keith's Indian Logic I owe my first connected view of the subject, and the understanding of many things. Vidyābhūṣaṇa provided the indispensable detailed annals of the school, and an invaluable pioneer account of Bauddha' logic.

I regret that I have altogether ignored Jaina logic. It may be that its earlier writings would throw light on the development of doctrine, besides adding much of logical interest. I have not had the time nor the courage to enter upon what would have led me far afield.

My thanks are due to the United Provinces Government for the grant of study leave which enabled me to carry out this work, and for generous assistance in the publication of it; to the United Provinces Government Press for their patience and courtesy in dealing with the difficulties of printing the book; and to my wife for assistance in compiling the Index.

ABBREVIATIONS USED IN CITING CERTAIN WORKS

J Bomb, R. A. S.	Journal of the Bombay Branch of the Royal Asiatic Society.
J. R. A. S.	Journal of the Royal Asiatic Society.
J. R. A. S. B.	Journal of the Royal Asiatic Society of Bengal.
Jhā, PSPM.	The Prūbhākara School of Pūrva Mīmānisā, by Gangānātha Ihā.
Jhā, transl.	Translation of the Nyāya Sūtra, Nyāyabhāṣya rud Nyāyavārtika, by Gaṅgānātha Jhā.
Keith, ILA.	Indian Logic and Atomism, by A. B. Keith.
Ma	Mīmāmsā Sūtra of Jaimini.
ΣBh	Nyāyabhāsya of Vātsyāyana.
NK	Nyayakandalī of Śrīdhara Miśra.
NRA	Nyāyaratnākara of Pārthasārathi Miśra.
NS	Nyāya Sūtra of Gautama.
NV	Nyāyarārtika of Uddvotakara.
NVT •	Nyāyavārtikatātparyaṭīkā (briefly the Tātparya of Vācaspati Miśra.
NVTP •	Nyāyavārtikatātparyaparišuddhi of Udayana (briefly, the Parišuddhi).
PBh •	The Bhāsya of Praśastapāda on the Vaišesika system.
Sl. Vārt.	Ślokarārtika of Komārila Bhaṭṭa on the tarkapāda of the Mīmānisā.
SDS	Sarvadaršanasanigraha of Mādhava.
TB	Tarkabhāṣā of Keśava Miśra.
VS ·	Vaišcšika Sūtra of Kaņāda.

Vidyābhūşaṇa, HIII .. History, of Indian Logic, by S. C. Vidyābhūṣaṇa.

bhūṣaṇa.

Do.

... Indian Logic Mediaeval School, by S. C. Vidya-

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INDIAN LOGIC IN THE EARLY SCHOOLS

HISTORICAL INTRODUCTION

Systematisation and redaction into sūtras—The Nyāya bhāyya of Vatsyāyana—Prasastapāda Bhāsya and the Pramāna-samuccaya of Dinnāga—• Uddyotakara and Dharmakīrti—Kumārila and Vācaspati Mišra.

I T is no longer true that a history, in the sense of dated annals, is impossible for Indian Philosophy. Great progress has been made in the last thirty or forty vears in the direction of evolving a chronological order out of a chaotic tradition. The origins remain misty:, but the relative chronology of the earlier writers is now becoming apparent: 600 A.D. an absolute chronology may be said to have been attained. The progress in the last respect may be illustrated by reminding sceptics that Fitzedward Hall's still valuable Index to the Bibliography of the Hindu Philosophical Systems (Calcutta, 1859) identifies Uddvotakara, whose date is now fixed about 600-650 A.D., with Udavana, who gives his own date as 984 A.D. Cowell cleared up this particular confusion in 1864, in his edition of Udayana's Kusumāñjali. Peterson in 1889 was still able to suggest that the Buddha himself was the author of the Nyāyabindu, which is in fact the work of Dharmakīrti, a near contemporary of Uddyotakara, as was shown by Pathak in valuable papers contributed to the Bombay Branch of the Royal Asiatic Society from 1892,—papers which made a great advance in the determination of

the relative chronology of philosophical works. But to fix even a single date may be the work of a syndicate of scholars working in different continents and in languages as diverse as Chinese, Tibetan, and Sanskrit: and it is necessary therefore to hasten slowly.

SECTION 1. SYSTEMATISATION AND REDACTION INTO SUTRAS

The systems and the sūtras

Of the six Brahmanical systems of philosophy five make their first appearance in literature in the form of sūtras, that is, collections of brief texts or aphorisms each one of which stands for more than it says, but which are threads in a coherent whole of doctrine. It is clear that these collections of what may be called chapter-headings cannot be first things in the history of the school to which each belongs; but that each had been the possession of a school, added to and altered from time to time as new opponents and new points of view presented themselves; and that each had a history extending over periods of varying length prior to the final redaction or compilation in which we now have them. Therefore, as has been pointed out, there are two chronological problems, which must be kept distinct, in connection with the sūtras. One is as to the date of their redaction into the present form. other is as to the date when the system finally redacted into these sūtras first began to exist in the shape of a body of doctrine which would have been recognisable as continuous with the doctrine taught in the sūtras as finally compiled. It is quite possible that a sūtra which we conclude to have been redacted at a rela-

¹H. Ui. Vaišesika Philosophy according to the Dasapadārthasāstra, pp. 11-12.

tively late date (for example, the Yogasūtra) may none the less teach a doctrine which had existed in recognisably the same form for centuries before it was redacted. It is on the other hand possible that names which later applied to a specific school were used in an early period in a different or in a much more general sense¹. This is undoubtedly the case with the terms nyāya and tārkika, which were later applied specifically to the Nyāya school, but in the earlier literature refer either to the Mīmānisā or else have a general meaning. In the case of the term Sānikhya (which had a very long history) it has been suggested2 that the name was originally given to any speculative doctrine which professed to achieve salvation by way of •knowledge (jñāna-māraa), as opposed to the doctrine of salvation by works,—of which yoga may have been a quite general appellation.

Pandits say that Yogāh (plural) was used as an early designation of the Vaišeṣika school. I am indebted to Mr. Kṣetreśacandra Chaṭtopādhyāya, lecturer in Sanskrit in the Allahabad University, for drawing my aftention to a passage in the Nyāṇyabhāṣya in which Vātsyāyana attributes to the Yogāh specifically Nyāṇya-Vaišeṣika doctrines, notably that of the asatkāryavāda (N. Bh. p. 38 I. 6. on NS I. i. 29). See his note on A Peculiar Meaning of Yoga, (published since this was written) in JRAS, Oct. 1927, pp. 854—858.

² Frånklin Edgerton, Sämkhya and Yoga in the Epic, Am. Jourea' ef Philology, 1924.

The Sāmkhya Rārikā appears from connect sources to be the work of an earlier contemporary of Vasubandhu,—Vindhyavāsin, that is to say Iśvara Kṛṣṇa. An account of perception referred to at NV p. 45-1.14 (śrotrādivṛttir iti) is called Vārṣaganyasya lakṣaṇam by Vācaspati Miśra at NVT p. 103-1. 10, and he is perhaps citing Vārṣaganya in the words paūcānām khalv indriyāṇām arthākāreṇa pariṇatānām ālocanamātram vṛttir iṣyate. (The terms are Sāmkhya-yoga: but ālocanamātra figures in Praśastapāda's account). Vārṣaganya is a definitely historical figure, perhaps the first historical figure in the Sāmkhya-Yoga tradition. We know the name of his work—the ṣaṣṭitantra—, and we have several references to and citations from him. See Keith Sāmkhya System pp. 62-63. Woods YSP p. xx.

For 'Vindhyavāsin' see Slokavārtika, anumāna, 143. The reference is not clear, but might be to Sāmkhya Kārikā 5-6. But the equation Vindhyavāsin—Isvara Kṛṣṇa is not established?

If then indications of the late redaction of a $s\bar{u}tra$ are not inconsistent with the early systematisation of the doctrine taught in the $s\bar{u}tra$, it is also true that early mention of a name which subsequently designated one of the schools is not necessarily evidence that the school existed at the date of the work in which the name is mentioned.

Relation of sūtras to Buddhist schools

Jacobi in his article on the Dates of the Philosophical Sūtras1 confines himself to the question of the period at which the sūtras were redacted, and relies principally on the passages in certain of the sūtras and earliest commentators which are directed against Buddhist doctrines. Steherbatsky² had used the same criterion, but (relying on the interpretation given by such later commentators as Vācaspati Miśra, Kumārila, and Samkara) argued that the polemic is directed against the idealist or vijñānavāda school of Buddhist philosophy, and that, as this doctrine was developed by Asanga and Vasubandhu, the sūtras in which this polemic is found could not be earlier than the date of these Buddhist writers. Jacobi showed effectively that the passages in question do not polemise against the idealistic doctrine of these thinkers, but can be interpreted as attacking the earlier nihilistic

^{&#}x27;Journal of the American Oriental Society xxxi, 1911.

²Epistemology and Logic as taught by the Later Buddhists, St. Petersburg, 1909. This is in Russian; but a communication from Steherbatsky summarising his arguments is embodied in Jacobi's article above referred to.—Steherbatsky's, work has now been translated into Germat.: by Otto Strauss, Neubiberg, 1924. The translation contains an appendix contributed by Steherbatsky in which he admits that the view put forward by him in 1909 can no longer be maintained. See next note.

or $s\bar{u}nyav\bar{a}da$ doctrine; and Stcherbatsky has recently admitted the correctness of Jacobi's conclusions, though still interpreting the $Nyayas\bar{u}tra$ as arguing against idealism of an early type².

The terminus a quo for the redaction of the Nyāyasūtra and, the Vedāntasūtra, and for the early Mīmānisaka commentator—the 'vrttikāra'—whose polemic against the Buddhist doctrine is cited Sabara's Bhāsya on the Mīmāinsā Sūtra, can therefore be pushed back to the period (sometimes identified with the time of Nāgārjuna) when the Sūnyavāda philosophy developed. Two of the sūtras,—the Mīmāmsa and the Vaiścṣika—, do not polemise against Buddhism, so that their date cannot be determined by this criterion. The Sāmkhyasūtra is admittedly a modern compilation, and plainly polemises against the developed vijnānavāda. The Yogasūtra 14—21) is said by Haughton Woods³ to attack the idealism of the rijnānavāda: and it is plain that the Bhāsya has the rijnānavāda in view. Woods relies on this, and on Vācaspati's explicit reference to a rijnānavādin vaināsika. But he admits that the sūtra tselfodoes not make reference to this or any other school. But if we are to rely on commentators' interpretations we should have to admit that the Nyāyasūtra and the Vedāntasūtra are polemising against the vijāānavāda: and Jacobi's arguments against this view are cogent4.

^{&#}x27;In his Addendum to Chapter I of his Epistemology and Logic of the Later Buddhists, contributed to the German translation of that work (Ercenthistheorie and Logik nach der Lehre der späteren Buddhisten: übersetzt von Otto Strauss: München-Neubiberg, 1924, pp. 259—266).

²For his present views see below, pp. 29-31.

^{*}James Haughton Woods Yoga System of Patanjali, pp. xvii-xvii. He says: "the fact remains that the Sūtra is attacking some idealist". The fact, I think, is that the Yogasūtra is here attacking the idealistic moment which, as I have argued below, was an element in the sūnyavāda, from the first.

^{• 4}Jacobi himself however holds that, the Yogasūtra passage is more easily interpreted if a reference to vijūānavāda is supposed. But the

Vidyābhūṣaṇa¹ has pointed out striking parallels in phraseology between Nāgārjuna's Mādhyamika-sūtra and the Nyāya-sūtra, which (as he supposes) show that the Nyāya-sūtra was redacted after the time of that writer. If this is so, the Nyāyasūtra in its present form falls in the period between Nāgārjuna and Vasubandhu².

Relations between the different sūtrus

It is sometimes held that the sūtras (other than the Yoga and Sūnkhya) must have been redacted at the same period, as they show traces of mutual influence. But intercourse between the schools in the long period preceding the redactions is perhaps sufficient to explain this: and there are indications that the Vaisesika, at any rate, was redacted at a comparatively early period.

Nyāya and Vaišeṣika

It contains no polemic against Buddhism, which it could hardly have ignored if it had been reduced to its present form after the rise of the Buddhist philosophical schools. Again the doctrine which it teaches owes nothing to the Nyāya, whereas the Nyāya sūtra reproduces the physiology and physics of the Vaiseṣika-sūtra, in some cases repeating actual phrases from the latter in a way which proves indebted-

supposition does not seem necessary, and other arguments which he adduces for a relatively late date (450 A.D.) for the redaction of the Yogasūtra are perhaps not conclusive. His argument is however cogent against the late tradition which identifies the author of the Yogasūtra with the author of the Mahābhāṣya.

^{&#}x27;Vidyābhūşana, History of Indian Logic, pp. 46-47: Nyāyasātra of Gotama p. x. Parallelisms with one or two lines in the Lankānatāra which he points out are, as I argue below, of no value as evidence.

²Keith, Indian Logic and Atomism, pp. 22—25.

The same consideration might be thought to prove an early date for the Mīmāmsā Sūtra. But absence of reference to the Bauddha schools here could be explained by the fact that the Mīmāmsā Sūtra is not a system of philosophy, but of exegetics. MS I. i. 5 refers by name to Bādarāyaṇa, the reputed author of the Vedānta Sūtra; though this in itself proves nothing.

ness¹. Had the Vaiśeṣika-sūtra been redacted later than the period of the systematisation of the Nyāya, it might have been expected to show some trace of Nyāya influence in its logic. But—though Vaiśeṣika logic is a more developed doctrine in the sūtra than is sometimes supposed—it shows no trace of Nyāya

'Ui, VP p. 16 n. 1. Five of the eight cases of parallelism which he cites are to be found in the first $\bar{a}hnika$ of the third $adhy\bar{a}ya$ of NS, which summarises Vaišesika physics and physiology in the course of an argument to prove that the soul is other than the body, the senses, and the 'mind'.—VS IV i. 8 is identical with NS III. 1. 39 ($anckadravyasamav\bar{a}y\bar{a}d$ $r\bar{u}pavišes\bar{a}c$ ca $r\bar{u}populabdhih$ —a doctrine typically Vaišesika).—Ui's other parallels are:—NS III. i. 54 = VS VII. ii. 20. NS III. i. 28 = VS IV. ii. 3.

In view of such parallelisms it is fair to say that the 'syncretism' of the $Ny\bar{a}ya$ -Vaisesika begins with the $Ny\bar{a}ya$ $s\bar{u}tra$ itself. $V\bar{a}tsy\bar{a}yana$ regarded the two $s\bar{u}tras$ as complementary.

VS VII. ii. 20 says sāmayikah sabdād arthapratyayah. NS II. i. 54 says ana, sāmayikatvāc chabdārtka-sampratyayasya. The parallelism here is,

as Ui rightly claims, " not doubtful ".

The rather curious phrase $bh\bar{u}yastr\bar{u}d$ in NS III. i. 71 must be repeated from VS VIII. ii. 5. (The $s\bar{u}tra$ in the Vizianagram edn. is III. i. 69). NS III. i. 63 (i.e. 61-62 in the Viz. edn.) very nearly sums up the Vaisesika doctrine of the special objects of the senses. NS I. i. 10 is a simplified version of the doctrine that the soul is inferrible from psychical qualities; omitting the philosophically dubious first part of VS III. ii. 4: with this omission the two $s\bar{u}tras$ become identical. NS III. i. 28 repeats the teaching of VS IV. ii. 2-3 that the body is composed, not of many elements, but of one, viz. earth. NS III. i. 35 is obscure but is interpreted by $V\bar{u}tsy\bar{u}ts$

A striking likeness to the Vaisesika which Ui does not note is in NS V i. 14, which teaches the characteristic Vaisesika dectrine that the universal $(s\bar{a}m\bar{a}nya)$ is gernal and perceptible by sense (aindriya-katva).—On the other hand NS II.ii.65-66 shows no trace of the Vaisesika doctrine of the universal and of Vaisesika terminology, though $V\bar{a}tsy\bar{a}yana$ in his comment ad. loc. plainly echoes the terminology of the Vaisesika $S\bar{a}tra$ (e.g., anekatra $pratyay\bar{a}nuvrttinimittam$).

The indication here is that NS II.ii.65-66 is teaching a pre-Vaisesika doctrine of the universal, while NS V. i. 14 is teaching a post-Vaisesika doctrine.

influence. It seems certain that the Vaisesika, both as a system and as a sūtra, is earlier than the Nyāya.

Nyāya and Mīmāmsā

Keith points out that the Nyāyasūtra shows acquaintance with Mīmānisaka terminology in the passage of the second book which deals with knowledge derived from words and the authority of the Veda (NS II. i. 49—69), and which asserts against the Mīmāmsaka the doctrines that words have meaning by convention and that the *Veda* had an author. There is no question that the two doctrines here controverted, and the doctrine of the eternity of 'word', existed prior to the redaction of the Nyāya and Vaiścsika sūtra; and it seems probable that the terminology of exegesis which we find in the Mīmāmsā sūtra—together with these doctrines—are older than any of the philosophical schools. But no indication as to the date of redaction of the Mīmāmsā sūtra can be drawn from the Nyāya and Vaisesika polemic. There is nothing however to prevent us from assigning an early date to the Mīmānisā sūtras, even in the form in which we now have them, so far as I know. The only consideration to the contrary is the absence of reference to the system and its author in the Mahābhārata: and not much weight can be attached to the argument from silence here¹.

Nyāya and Vedānta

The relation between the $Ny\bar{a}ya-s\bar{u}tra$ and the $Ved\bar{a}nta-s\bar{u}tra$ may become clearer when a careful comparison shall have been made between the polemical passages in the two $s\bar{u}tras^2$. Keith states

¹See Keith, Karma-Mīmāmsā, pp. 5-7.

 $^{^2}Ved\bar{a}nt\bar{a}.s\bar{u}tra$, first and second $p\bar{a}das$ of the second $adhyuya:Ny\bar{a}.s\bar{u}tra$, $adhy\bar{a}ya$ III, and IV.

that Gautama is familiar with the terminology of the Vedānta-sūtra¹, and he finds in the ścsika-sūtra references to the teachings, and reminiscences of the phraseology, of the Vedānta-sūtra2. On the other hand • the Vedānta-sūtra has finite polemic against views found in the Vaiscsikasūtra3: and Jacobi has shown that its polemic against the Bauddha corresponds to the polemic in the $Ny\bar{a}ya$ - $s\bar{u}tra^4$, neither being directed against the later $vij\tilde{n}\bar{a}nav\bar{a}da$ doctrine; while the $Vai\acute{s}es\acute{i}ka-s\bar{u}tra$ contains no such polemic. The indications seem to be the *Vaisesika-sūtra* is earlier than $d\bar{a}nta$ - $s\bar{u}tra$, as it is earlier than the $Ny\bar{a}ya$ - $s\bar{u}tra$: while the two latter sūtras may have assumed their present form at about the same period.

Origins of the Nyāya

When did the Nyāya doctrine begin to exist in a form recognisably continuous with the doctrine as we have it in the Nyāya-sūtra? In other words, what is its systematisation-period, as distinguished from its redaction-date? In order to clear the ground for this enquiry it is first necessary to ask what is specially Naiyāyika in the Nyāya doctrine. For its physics and physiology and psychology are not specifically its own; being from the first indistinguishable from those of its sister-śāstra, the Vaiśeṣika. What

¹Keith, *ILA*, p. 25. The only parallel he gives is *NS* III. ii. 14—16=*Ved. S.* II. i. 24. But this is only the 'stock example' of curds arising from milk, and does not amount to evidence. The *Bhagavadyītā* 13.5, 15.15, speaks of a *brahma-sūtra* and *vedānta-kṛt*.

²op. cit. p. 24. "Kānāda declars that the soul is not proved by scripture alone, that the body is not compounded of three or five elements; and his use of avidyā 'ignorance', and pratyagātman 'individual self' is reminiscent of the Brahma Sūtra'.—The terminology and the doctrines mentioned may well be earlier than the Vedānta Sūtra.

^{*}Ved. S 2. 2. 17 is a sneer at the Yaisesika, not at the Nyāya.

^{*}See footnote 1 p. 93 infra.

characterises it specifically appears to be primarily its development of the ' $ny\bar{a}ya$ ' or five-membered method of demonstration: and, in connection with this, its insistence on four sources of knowledge. corresponding to the first four members of its demonstrative formula, or 'syllogism'. The emphasis which it laid on the independent status of testimony as a means of proof made it in theory more 'orthodox' than the Vaiścsika, which nominally recognised only perception and inference as sources of knowledge: and, though in practice the difference was small, this may have been the decisive advantage which enabled the younger śāstra to supplant, as it did, the elder: of which it may perhaps fairly be called a revised version. The importance of the Nyāya therefore is in its doctrine of the pramanas, or sources of proof, and in its formulation of the nyaya, or method of demonstration, from which it took its name. It is therefore correct to regard the Nyāya as, above all else, a school of logic.

The question then amounts to this. When does logic, as taught in the Nyāya-sūtra, first make its appearance? There is a reference in the Mahābhārata which is quite definite:—

pañcāvayavayuktasya rākyasya guṇadoṣarit¹. ''Knowing the virtues and defects of the five-membered syllogism.'' It is not possible to doubt² that we have here a reference to the specific $Ny\bar{a}ya$ doctrine

Quoted by Vidyābhūsana in his $Ny\bar{a}ya$ $S\bar{u}tra$ of Gotama, p. xvi. The reference is $Mah\bar{a}bh\bar{u}rata$, $sabh\bar{u}parva$, $adhy\bar{u}ya$ 5 (ii. v. 5). The same passage has a reference to the Romans; which suggests a late date.

²Vidyābhūṣaṇa cites several other passages from the Mahābhārata which refer to a turkasāstra, carkavidyā, hetusāstra, ānvīksikī nyāyasiksā, etc. But in none of these can we be quite sure that the reference is to our $Ny\bar{a}y$: system. The reference may be to rationalising and scentical methods such as certainly existed in very early times.—Manu in one place excommunicates the twice-born sceptic and critic of the veda who from reliance on hetusastra' despises śruti and smrti: and Kullūka Bhatta explains this as a reference

of demonstration. But it does not help us to carry the date of the system any further back, seeing that the present redaction of the *Mahābhārata* may be as late as 200 Å.D.

In the medical works of Suśruta and Caraka, and in the Arthaśāstra attributed to Kautilya, there are lists of tantrayukti, that is to say methodological technical terms used in the particular tantra or śāstra: and one of these,—the tantrayukti of anumata, i.e., the principle of tacit acceptance, 'what is not denied is admitted'—is quoted and used by Vātsyāyana'. The names of some of the tantrayukti figure in the terminology of the Nyāya': but the accounts given in the lists themselves do not tally with the meanings which the Nyāya assigns to the terms, and the lists are clearly independent of the Nyāya. There is no trace of system underlying these collections of more or less technical terms, and nothing of logic in them.—There is however a section in Caraka's work devoted

to Cārvāka and other sceptics (Manu II. 11). In other places he insists on the use of tarka—not conflicting with veda and dharmaśāstra—as essential (XII. 106), enjoins the study of $\bar{a}nv\bar{i}k\dot{s}ik\bar{\imath}$ $\bar{a}tmavidy\bar{a}$ on a king (VII. 43), and says that haitukas $tark\bar{\imath}$ should be among the members of a parisad (XII. 111). None of these passages need refer to the logic of the $Ny\bar{a}ya$ $s\bar{u}tra$: although Vātsvāvana seems to refer to Manusmrti VII. 43 when he claims that the $Ny\bar{a}ya$ is $\bar{a}nv\bar{i}k\dot{s}ik\bar{\imath}$ $\bar{a}tmavidy\bar{a}$ (N. Bh. p. 7 1. 4).—A passage in Kauţilya's Arthaśāstra throws together under the name of $\bar{a}nv\bar{\imath}k\dot{s}ik\bar{\imath}$ the Yoga, $S\bar{a}mkhya$, and $Lok\bar{a}yata$.

¹NBh p. 16 l. 9 paramatam apratisiddham anumatam iti hi tantra-yuktih. Vidyābhūṣana, H1L pp. 24—26.

²e.g. prayojana, samśaya, nirnaya, padärtha, upamāna, arthāpatti, prasanga, ekānta and anekānta, hetvartha, apadeśa, uddeśa, nidarśana, viparyaya.

Each list gives definition with examples: Susruta's examples are taken from medicine, Kautilya's from his own śāstra. The lists do not agree in the meanings attached to the technicalities in all cases. Thus Susruta says aftena kāranenety apadešah.—Yathāpadišyate madhureņa na šlesmā bhirardhate. Kautilya says evam asāv āha ity apadešah: and he illustrates it by a quotation ending iti Kautilyah. See Susruta, ultaratantra 65; Caraka, sidahisthāna, 12, Kautilya arthašāstra 15th adhikarána of 1st adhyāya (Mysore edn. p. 424).

to strictly logical conceptions, the teaching of which perhaps represents a popular version of the $Ny\bar{a}ya$, divested of all subtleties and adapted to the understanding of the layman. But here again the date of Caraka's work in its present form is so uncertain that the passage does not help towards fixing the systematisation-period of the $Ny\bar{a}ya$. The same may be said of a supposed reference to the $Ny\bar{a}ya$ in the $Milindapa\bar{n}ha$, where King Milinda (Menander of Baetria, c. 150 B.C.) is said to have been versed in $S\bar{a}mkhya$, $Yoga^2$, $N\bar{\imath}ti$, and Vaisesika. $N\bar{\imath}ti$, in the context, may mean $Ny\bar{a}ya$; though the use of the word in this sense is perhaps without a parallel.

In the older literature, that is, in works to which a date definitely prior to the Christian era can be assigned, there is complete absence of reference to the $Ny\bar{a}ya$ as a system, though the word $ny\bar{a}ya$ occurs either in the general sense of a decision

^{&#}x27;Vidyābhūṣana's suggestion that it embodies "the principal doctrines of Ānvīkṣikī, possibly as propounded by Medhātithi Gautama" has nothing to recommend it (H1L p. 25. Vidyābhūṣaṇa distinguishes two authors of Nyāya doctrine—Gautama and Akṣapāda—the latter much later than the former). Vidyābhūṣana holds that Medhātithi was another name for Gautama (or Gotama). But the only grounds for this assertion would seem to re the mention in the Mahāthārata (Sāntrparran, 265) of a Methātither mahāprajūo Gautamas tapasī, and the reference in Bhāsa's Pratinā (p. 79) to a Medhātither Nyāyasāstram. There is nothing to show that the Mahabhārata sage had any connection with the legendary founder of the Nyāya: and Bhāsa's reference, according to Barnett (Bulletin of the London School of Oriental Studies, 1924, p. 520) is to a late Manubhāṣya by an author named Medhātithi. See also F. W. Thomas in JRSS, 1925, p. 107.

²See note 1 to page 3, above. Yoga cannot mean Vaisesika here, seeing that Vaisesika is separately mentioned.—There seems to be no reason to take nīti in any other than the usual sense of nīti śastra. Sānikhya and yoga here may have the wider significance which Edgerton would give to the terms: see note 2 to page 3, above. The passage would then refer to the doctrine of salvation by knowledge, the doctrine of salvation by works, the science of government, and the Vaisesika philosophy. That is, of the philosophical systems as we now have them, it refers to one only. This supports the view above suggested as to the priority of the Vaisesika to the other (developed) systems. If the author of the Milinda-pañha had known the Naāya there would have been some trace of its logical method in the work.

or conclusion, or in the special sense of Mimāmsā principles1. The Buddhist Pali Canon gives the impression of belonging to a pre-logical phase of thought: and this is true even of the Kathāvatthu, in which we find some terms which are familiar as technicalities of the $Ny\bar{a}ya$ system, e.g. $pratij\tilde{n}\bar{a}$, upanaya, nigraha, nigamana, $upam\bar{a}$. It cannot be said that these are not used as technical terms, for their application is systematic²: but they are not technical terms of syllogistic analysis. They are used in connection with a stereotyped scheme of discussion which is applied with wearisome iteration to a variety of topics. The debate has in the first instance five phases: each phase is an argument in itself: and the fourth and fifth phases are called respectively the upanaya and the nigamana. The first phase is called anuloma, the second pratikarma (patikamma), and the third nigraha. The five phases together constitute the first nigraha. Then follows a second nigraha; with five similar phases except that the first phase is 'now pratyanīka (paccanīka) instead of anuloma. Six other 'nigrahas' follow, in two sets of three: the first set of three being modifications of the first niaraha by insertion of the words 'everywhere, 'always', 'in all cases': the second set of three being corresponding modifications of the second nigraha. These eight nigrahas appear to constitute a dialectical whole (KV I. i. 1-16): a five-phased argument pro,

Keith, ILA, pp. 10-11.

[&]quot;Keith in ILA pp. 13-14 speaks of these as terms" which later in Gautama's logic are technical terms, but which at this period have their more general sense": but in his Buddhist Philosophy pp. 303-1 he writes in this connection "we may suppose a contemporary logic, but nothing of it is said". Vidyābhūṣaṇa, IIIL pp. 234—240, gives a sample of the Kathāvatthu method of disputation in connection with which these terms are used.—The Kathāvatthu has been translated under the title Points of Controversy (Pali Text Society, 1915: edited in the same series of publications, 1894—7), and a note on its 'logic' by Aung is contributed to the preface.

a five-phased argument contra, three modes of the pro argument, and three modes of the contra argument.

There is method here—too much of it2—but it is in no way comparable to the method of the $Ny\bar{a}ya$. truer parallel is to be found in the ten-membered debate (miscalled 'syllogism') as stereotyped by the Jaina logician Bhadrabāhu, and probably in the tenmembered method which Vatsyāyana attributes to certain methodologists (naiyāyika). The Kathāvatthu, in fact, so far from proving that logic existed in the third century B.C., is an indication that it did not exist: for, if it had existed, this cumbrous methodology could hardly have remained in use. It further indicates that logic was preceded by attempts to schematise discussion, attempts which were inevitable in view of the habit of organised public discussion which prevailed in early India, but which could not succeed until the nerve of argument had been separated from the irrelevances in which the early methodology obscured it, and plainly exposed in a formulation of the syllogism⁵. When that was first done a genuine logical analysis began to exist. But there must have been a period of tentative groping after logical

^{&#}x27;It is worth while to point out that the number of the phases in a nigraha corresponds to the number of members in the Naiyāyika syllogism, and that the upasaya-phase and nigamana-phase in the nigraha are fourth and fifth phases; just as the upanaya and nigamana are fourth and fifth members of the syllogism.

²In virtue of its method the Kathāvathu is insufferably tedious. ³Vidyābhūṣaṇa, HIL pp. 166-167.

The date claimed by late Buddhist tradition for the Kathāvatthu. It is of course a true observation of Locke that God Cd rct make men barely two-legged animals and leave it to Aristotle (or Akṣapāda) to make them rational. Children and savages reason as well as logicians on matters that concern them. But to do a thing it not to know how it is done. Aristotle and Aksapada showed how reasoning is done; thereby teaching, not indeed how to reason, but how to argue. The syllogism is not the universal form of reasoning: but it is the universal form of argument: and its formulation marks the transition from a pre-logical to a logical method of argument. In other words it marks the transition from a stage of culture in which people can talk irrelevantly to a stage in which irrelevance is not tolcrated. Early argument is incredibly irrelevant and tautologous.

method before it was achieved. This period is marked by a work like the Kathāvatthu, which is claimed by later tradition to belong to the age of Aśoka, c. 250 B.C., and may be much later. Assuming that the Buddhist culture of the period was not inferior to contemporary Brahmanical culture, we can that logic did not yet exist in India at the period of which the Kathāvatthu is representative: though some of the terms which afterwards became vehicles of genuinely logical conceptions were already being used systematically in connection with a methodology which was not yet logical, and which may not unreasonably be thought to have been separated by several generations from the beginnings of logic proper. But by the time of Nagariuna (whose Madhyamika $K\bar{a}rik\bar{a}$ is a really powerful piece of dialectic) thought and discussion had been completely logicised: and he uses terms which are definitely technical terms of logic proper. His date is still somewhat indefinite. ·Ui places him about 113-213 A.D., on a computation of dates given by Kumārajiva and his Chinese disciples4. Keith however, with Jacobi, assigns him to a date about 200 A.D., on the ground that

It might be suggested that a vernacular scetarian literature like the buddhist Pāli Canon was in fact provincial and representative of a lower stratum of contemporary culture.

²Other terms in the Kathāvatthu which are significant are: lakṣaṇa yuktikathā (discussion based on argument from the marks or properties of the thing); vacanašodhana (clearing up the statement, which considers 'the extension of the subject in relation to its predicate '—HIL p. 238); śuddhi-kasaṃśyandana, and upamāsaṃśyandana (simple comparison and analogical comparison?). See KV I. i. 129 and 137, HIL 237 and 238.

^{*}e.g. the use of $s\bar{a}dhyasama$ in MK IV 8-9. I am not sure whether the term is used here as the $Ny\bar{a}ya$ $s\bar{a}tra$ uses it. The $K\bar{a}rik\bar{a}s$ are difficult to interpret and demand intensive study. But that it is a genuinely logical conception is certain.

⁴Ui, VP, p. 43, Kumārajīva went to China in 401 A.D. and was the earliest translator into Chinese of the works of Nāgārjuna, Āryadeva, and others. He was the chief translator of the works of the Sūnyavāda (Uir VP, p. 3 r. 2, and p. 42 n. 1).

"Āryadeva, who was apparently a younger contemporary, uses . . . the words $r\bar{a}\dot{s}i$ and $v\bar{a}raka$, showing therefore a knowledge of Greek astrology, which can hardly be supposed to have reached India in this form before 200 A.D.''1

This much may perhaps be taken as proved, that logic proper did not exist in India before 200 B.C.² and that it had come into existence by 200 A.D. somewhere between these dates the Vaisesika and the Nyāya were systematised; the Vaišesika being the earlier of the two. Ui3 argues that the Vaisesika cannot have been systematised before 300 B.C. or after A.D.:—not before 300 B.C., because the Kauţilīya Arthaśāstra includes only the Sāmkhya, Yoga, and $Lok\bar{a}yata$ under philosophy' $(\bar{a}nv\bar{\imath}k\bar{\imath}ik\bar{\imath})^{3}$: and not after 18 A.D., because Vaisesika doctrines were imported into Jainism in the sixth schism, of which the date is said to be 18 A.D.5 The reasons given have been criticised on the ground that the Kautiliya is no authority for so early a period, and that the Jaina chronology and tradition is uncertain. And the mention of the Vaisesika system in the Mahāribhāsaśāstra which is traditionally connected

²The differences of opinion as to the chronology of the PHi Buddhist Canon are suck that it is almost useless to base any argument upon it. The date 200 B.c. is on the assumption that the form of the Kathāvatthu is

representative of Asokan culture.

founder of the Vaiścsika system.

¹Keith, *BP*, p. 229.

³VP. 33-38. His argument (pp. :18-33) connecting the origins of the Vaisesika with earlier speculations—they can hardly be called philosophies—is suggestive. Some of these 'lost philosophies' (so to speak) were probably fathered by Biahmanic tradition on the Lokayata or Carvaka school: and some of them are possibly to be found in the strange assertment of doctrines reviewed in the first āhnika of the fourth adhyāya of the Nyāyasittra. See Gopinatha Kaviraj's introductions to Jhā's translation of the Nyāya, 8-12.

In this Ui follows Oldenberg and Jacobi. Keith objects that the Kautilīya is probably a work of several centuries after Christ.—Even so, it clearly embodies much older matter; and this definition of unvīkṣiki is a case in point. Yoga here might mean Vaisesika. See p. 3 n. 1, above.

5The Jainas say that Rohagutta, the chief schismatic, is in fact the

with Kaniska's Council in the first century A.D., and in Aśvaghosa's Sūtrālamkāra, would be more helpful if the dates of these works were more definite. The same may be said of the mention of the Vaisesika in the *Milindapañha*¹. Nevertheless the indications, such as they are, point to the beginning of the first century A.D. as the latest date for the systematisation of the Vaisesika. It does not seem possible to arrive at any more definite conclusion than this. .It seems likely that the Vaisesika system had been systematised into a form very like that of the existing sūtras by about the beginning of the Christian era, and that its by no means undeveloped doctrine of inference and fallacy became the basis of the formulation of demonstration which is the specific achievement of the Nyāya school, somewhere between the beginning of the Christian era and the end of the second century after Christ.

But there is another strain in the Nyāya besides the Vaišeṣika. The elaborate organon of logic and dialectic which it contains ends, as Aristotle's organon ends, with a book on sophistici elenchi (jāti, and nigrahasthāna). The school had to deal with an ingenious dialectic of sceptism which had its origin in early speculations², but achieved its most conspicuous form in the śunyavāda or nihilist doctrine of Buddhism: a doctrine which found its most perfect expression in the Mādhyamika Sūtra of Nāgārjuna, although he need not be thought to have been its first

¹There is no trace of logical conceptions, as the $Ny\bar{a}ya$ understands logic, in the *Milindapaāha*. We may infer from it that at the time when the bulk of that work was written logic did not yet exist in India.

²See Ui, VP, pp. 22-23 and his footnote ² to p. 23. One of the early speculators, Sanjaya Velatthi-putta says: "If you ask me whether there is another world—well, if I thought there were, I should say so. But I don't say so. And I don't think it is thus or thus. And I don't think it is otherwise. And I don't deny it." (cited by Ui, loc. cit., from SBB vol. ii, p. 71).

systematiser. And, besides this, there was the early methodology of debate of the pre-logical period, with its stereotyped formulae of discussion—tenmembered 'nyāyas' and the like—which preteded the pañcāvayavavākya, the five-membered syllogism of the Nyāya. The genuinely logical formulation of demonstration given in the Nyāya supplanted these cumbrous forms; but not without being influenced by them. There were historical, rather than logical, reasons for the fact that the Naiyāyika syllogism had five members: and the Nyāya certainly owes many of its technical terms to the early methodologists. But none the less the logic of the Nyāya is a new creation. With the pañcāvayavavākya India began to argue logically for the first time. The Nyāya can therefore justly claim to be an epoch-making work: or at least an epoch-marking work.

SECTION 2. THE NYAYABHASYA OF VATSYAYANA

The earliest extant commentary on the $Ny\bar{a}ya-s\bar{u}tra$ is the $Bh\bar{a}sya$ of Vātsvāyana, who is sometimes called Pakṣilasvāmin. As it does not reply to criticisms which we know that Vasubandhu brought against the $Ny\bar{a}ya-s\bar{u}tra$, and as it is itself cited and criticised

^{&#}x27;Keith, BP, p. 230 "We need not, of course, take seriously the conception of Nāgārjuna as the creator of the Sūnyavāda philosophy". Therefore references to the Sūnyavāda in the Nyāyasūtra are not necessarily references to Nāgārjuna: unless the phrases in NS which are parallel to phrases in MK first originated with Nāgārjuna. It is possible to regard them as 'tags' which are repeated by Nāgārjuna from earlier Sunyavāda writers: in which case Vidyābhūṣaṇa's argument for the priority of Nāgārjuna to the NS passages in question, and Jacobi's assumption that the date of Nāgārjuna gives the earliest limit for the composition of the Nyāyasūtra, fall to the ground. Nagārjuna in his Dašabhūmiribhūsāšāstra refers to the Sāmkhya, Yoga, and Vaišesika: but it is hardly safe to infer from this that the Nyāya as a system had not yet originated—for Vaišesika doctrines are so similar to Nyāya that separate mention of the later may have been felt to be unnecessary. The question of the relation of Nāgārjuna to the Nyāya (a) as a system (b) as the present sūtra, must, it would seem, be ieft open still.

by Vasubandhu's disciple Dinnāga, it must be prior to both these Buddhist writers. It has been argued that it must be separated by a considerable period from the systematisation of the $Ny\bar{a}ya$ because it gives alternative explanations which prove that the sense of the sūtras had already in some cases become obscure. And it speaks of the sūtrakāra as a rsi (NBh p. 68 1. 7), which implies that the system had already succeeded in surrounding itself with the halo of a legendary antiquity: but this perhaps proves little, for no system could hope for a hearing without the fiction of antiquity: and therefore any system would be born old, so to speak. Another very interesting line of argument, first put forward by Windischi, •has found general acceptance. It is based on the fact that there are embodied in the Bhāsya certain sūtralike 'sentences', on which the Bhāsya comments, but yet which do not appear to have for the author of the $Bh\bar{a}sya$ the status of $s\bar{u}tras$, and are in general not classed as sūtras by the later commentators (though in particular cases there is difference of opinion). The view put forward by Windisch is that these 'sentences' are citations made by the $Bh\bar{a}sya$ from an earlier commentary on the sūtras: which would imply a considerable interval of time between the sūtras and the Bhāsya. But three considerations may be urged in this connection:

(1) There are in Uddyotakara's $V\bar{a}rtika$ and Praśastapāda's $Bh\bar{a}sya$ a large number of passages which convey precisely the same impression as these 'sentences' in the $Ny\bar{a}ya$ - $bh\bar{a}sya$: that is to say, these works also contain statements of $s\bar{a}tra$ -like brevity which are then commented on or amplified by the text. It has not been suggested in the case of these two works that the preliminary brief statements are citations

¹E. Windisch über das Nyāyabhüşya, Leipzig, 1888.

from earlier commentaries. Of course they may be. But does it not seem more likely that we are here confronted with a trick of style, common to the older schools,—the trick or mannerism of first condensing a meaning into an aphorism, and then explaining it? The habit of commenting may be supposed to have become so engrained that a writer felt the need of a text to everything he wrote. This characteristic of 'Bhāṣyas' is recognised by Indian tradition—''Sūtrārtho varnyate yatra padaih sūtrānusāribhih, svapadāni ca varnyante, bhāṣyam bhāṣyavido viduh.''

- (2) The Bhāṣya never refers to an older commentator, and does not mark these 'sentences' as quotations with an iti. The iti,—where 'iti' is used—follows the explanation, and not the 'sentence' explained. It is the iti which means 'that is to say': and which would be used by a writer amplifying even his own epigrams or apophthegms.—Of course it may be used to mark an explanation of some one else's apophthegms. But there is no need to suppose that this is so.
- (3) On the other hand there is an obscure passage in which the author of the Bhāṣyu himself draws attention to the relation between one of these 'sentences' and a sūtra which follows in the immediate context. The 'sentence' is the first of three embodied in the Bhāṣya on NS. II. i. 11, and runs:—
 UPALABDHIHETOR UPALABDHIVIṢAYASYA CĀRTHASYA PŪR-VĀPARASAHABHĀVĀNIYAMĀD YATHĀRTHADARŚANAM VI-BHĀGAVACANAM. This means that "as there is no fixed rule that processes of apprehension should in all cases precede, or in all cases follow, or in all cases be simultaneous with, the objects apprehended.

we assert precedence or sequence or simultaneity in any particular case according as experience shows this that or the other alternative to be true ". This is, as Vātsyāyana says, the solution (samādhi) of the difficulty put by the objector (NS. II. i. 8—11). But it is not given at once by the sūtrakāra, who retorts, in sūtra 12, that the Bauddha's own proof will be exposed to just this dilemma; in sūtra 13, that if all proofs are invalid, the Bauddha's proof is invalid; and in sūtra 14, that if on the other hand the Bauddha's proof that all proofs are invalid is itself valid then it is not true that all proofs are invalid!— Then comes sūtra 15: TRAIKĀLYĀPRATISEDHAS CA ŚABDAD ATODYASIDDHIVAT TATSIDDHEH-"and there is no denying the three time-relations, since this is established; as the musical instrument is established from its sound". Vātsyāyana explains this rather ambiguous sūtra as giving precisely the same solution of the difficulty as that given in the 'sentence' cited above and embodied in his comment on sūtra 11.—Why then are the 'sentence' and the sūtra given in different places? Vātsyāvana himself raises the difficulty: and the mere fact of his

The objector is a Mādhyamika, and he is arguing that the very notion of proof involves self-contradiction. He puts forward a dilemma based on the three possible time-relations between pramāņa (means of apprehension = npalabdhihetn) and prameya (appreher object=upalabdhirisaya). If perception is supposed to exist before the percept, then perception cannot arise rom contact with its object—for the object does n t vel exist: if alter, then the supposed antecedent object cannot be identified—ith the percept—a percept being that which is being perceived: if simultaneo sly, then we ought not to get successive apprehensions of the colour, scent, taste, etc. of the object—since these are supposed to co-exist at one and the same time in the object ".e. there should not be a subjective order of presentations different from the objective order of existences.)—Sūtra 8 states the general nature of the dilemma: pratyakṣādinām aprāmānyam traikalyāsiddeh. Sūtras 9, 10 and 11, state the three branches of this dilemma.

Vācaspati Miśra attributes the dialectic to the Mādhyamika at NVT p. 251 l. 1 and p. 249 l. 3. In the latter passage he gives an exposition of the Mādhyamika position, which is cited by Poussin in a note to p. 57 of his edition of the Mādhyamika Kārikā. Poussin says: "l'attitude des philosophes Bouddhiques est expliquée avec précision".

doing so has been taken to indicate that in his view the two statements stand on the same level. He does not however seem to have treated the 'sentence' as a $s\bar{u}tra^2$. On the other hand it seems that he does not offer it merely as a part of the $Bh\bar{a}sya$, that is, as part of his own comment. Nor does

Note to vol. ii. p. 45 of Jhā's translation. Dr. Jhā says that Vātsyāyana seems to imply that the 'sentence' and the sātça' 'stand on the same level, being the work of the same writer'. But had Vātsyāyana definitely thought of the 'sentence' as being the words of Gautama he would have included it in his sātrapātha; which he does not seem to do.—Dr. Jhā raises the general question of these 'sentences' in this note. He postpones consideration of it to the Introduction. In the Introduction (contributed by Paṇḍit Gopinātha Kavirāja) Windisch's view is accepted (p. 13).

What Vātsyāyana says is: "Why is this said again? For the purpose of connection with what has been said before: that is, in order that the statement made before to the effect that 'there is no fixed rule that processes of apprehension must precede, follow, or be simultaneous with, the apprehended object', might be understood to arise from the present statement'. (The first clause may mean "Why again is this said?" And the phrase taditahsamutthānam is ambiguous in respect of the pronouns. Uddyotakara's paraphrase at NV p. 194 is equally dubious). "The fact is that the rgi has in view the fact that there is no fixed rule, and so he here rejects the denial of the three time-relations—a denial grounded on the supposition that there is a fixed rule (aniyamadarsî khalv ayam rşir niyamena pratişedham gratyacaste) . . . He gives an illustration of one mode (of the three possible time-relations) in the words 'as a musical instrument from the sound Because this is intended as an illustration, the illustrations of the other two modes are to be supplied from what has been said before.- Why was that not stated here?—Because what has been said before is being explained. The meaning had to be cleared up some way or other, - whether it be cleared up here or there makes no difference ".

It is difficult to get at the meaning of this passage. Vācaspati Miśra says: "He puts an objection to the reading of this (sūtra 15), in the words why is this said? If he has on his own responsibility already stated the force of this sūtra, there is an end to a sūtrapūtha altogether (i.e. there is no use in having sūtras at all, if we are going to anticipate the sūtra's meaning before the sūtra is stated). He replies that what was then said was not said by him as something over and above the sūtra (utsūtram), but was just the meaning of the sūtra itself and that his sūtrapūtha is meant to show that this is the case." The Vārtika raises the question—why did he depart from the sūtra-orzer and give his comment in the previous passage. That is, why was not that comment given here, under sūtra 15? The Bhāsya answers this in the words 'The meaning had to be interpreted some way or other—whether here or there is no matter'. This comment seems to indicate that in Vācaspati's view the 'sentence' is just a part of the Bhāsya.

See also p. 49, footpote 1.

²Dr. Jhā notes that the 'sentence' appears as a sūtra in the sūtrapatha attached to one of his MSS, and that the commentary Bhāsya-candra
appears to regard it as a sūtra. But Vācaspati Miśra's Nyāyasūcinil andha
does not give it as a sūtra, nor does Uddyotakara treat it as such.

the suggestion that these sentences are citations from an earlier commentator meet the special problem of this passage. In what sense then was it that the sentence and the $s\bar{u}tra$ stood on the same level?

It seems to me that what Vātsyāyana says implies some such state of affairs as this.—He had to deal with a mass of material which formed the tradition of the school and which existed largely in sūtra form. There was already a doubt as to how much of this was to be called 'sūtra' and treated as the very words of an already legendary founder. There were also differences of opinion as to the interpretation of some of these traditional formulae. There is nothing to show that before Vātsyāyana's time there existed any standard sūtrapātha and commentary. things go together: for it would be impossible to construct a sūtrapātha without at the same time giving an interpretation. Others may have essayed the task of redaction and interpretation of the school tradition: indeed every teacher must have done it in some degree. But Vātsyāvana's work presents itself as the first standard redaction and interpretation: and there is nothing to show that anything except a relatively fluid tradition preceded him. There would be a certain amount of aphoristic tradition in the school which for one reason or another he would feel to be the meaning, though not the ipsissima verba of the rsi. These he would exclude from his sūtrapātha. but include in his $Bh\bar{a}sya$: not as citations from any definite author, but as the heritage of the school and as carrying an authority only less than that of the sūtras themselves. Such appear to be some of the 'sentences' embodied in the $Bh\bar{a}sya$. And it is in this sense that some of the 'sentences' and the $s\bar{u}tras$ stand on the same level ",-not as being the work of the same writer; but as belonging to the same body

of tradition and as being no less representative of the rsi's intention. That Vātsyāyana himself was the author of any of the sūtras seems highly improbable. But as a redactor he would have a certain latitude, and would be dealing with a kody of teaching which had grown up over a considerable period of time and which included comparatively recent developments within the school. After one or two generations what was new would begin to be indistinguishable from what was old,—especially as any new argument would always be put forward as part of what the rsi meant even if he did not say it: and the fact that he did not say it would very rapidly be lost sight of in a fluid tradition. There was probably little or no deliberate interpolation: and vet Vātsvāyana's redaction would embody as sūtras doctrines which had in fact entered the tradition of the school within only two or three generations of his own date. Some of these sūtras stand for teaching which arose in sition to the Mādhyamika doctrine, and pernaps (though this is far from certain) in opposition to Nāgārjuna himself. If we suppose this teaching to have arisen even as late as 200. A.D. there would be nothing to prevent Vātsyāyana from including it in his sūtrapātha about a hundred years later. So far then as this argument goes he could have done his work of redaction and comment as early as 300 A.D. And this date will allow for priority to Vasubandhu and Dinnāga, even if we place these teachers in the earliest period which has been assigned to them, namely, c. 350 and 400 A.D., respectively.

SECTION 3. PRASASTAPADABHASYA AND THE FRAMANA-SAMUCCAYA OF DINNAGA.

There is a period of upwards of three centuries between Vātsyāvana and the next Naiyāyika commentator, Uddyotakara. The interval saw a remarkable

development of logical doctrine which appears to have been due in part to the rise of a Buddhist school of logic and in part to the elaboration, by Vaiscsika commentators, of the comparatively simple logical conceptions embodied in the Vaisesika Sūtra. The velopment was in the direction of a formal logic (as we should call it), and is characterised by the explicit formulation of a Canon of Syllogism, in the form of the *Trairūpya* or 'three characters' of a valid middle term; and by a syllogistic, and a classification of fallacies, largely based on this canon. When logic passed into the hands of schools which recognised only two instruments of knowledge—perception and reasoning—instead of the four recognised by the Nyāya school, there ceased to be any real reason for retaining the first and fourth members of the five-membered nyāya or method of demonstration: for, as Vātsvayana teaches, the value of the first member is to lend authority to the demonstration, and of the fourth to contribute some (not very clearly conceived) analogical factor to the argument. Schools which rejected authority and analogy as independent means of proof would naturally find no function for the 'Proposition' and the 'Application,' and would therefore tend to a three-membered syllogism. The logic of this period is not altogether consistent in this respect: it continued, for example, to recognise authority, in admitting False Proposition as an independent class of fallacy. And it did not altogether, reject the fiveanembered syllogism, but contented itself with drawing a distinction between inference as drawn by one-self and inferential apprehension as conveyed to others. The latter retained the five-membered form. Finally, although the new doctrine formulated the third member of the Naiyāyika syllogism as a statement of inseparable connection between abstract

characters or universals (avinābhāva—the later vyāpti), with the order of the terms fixed according to a formula (vidhi) 'whatever is M is P, and whatever is not P is not M', it still retained the mention of examples (which are in fact an essential element in its formulation of the trairūpya or canon of syllogism), and it retained the old name 'exemplification' (nidaršana = udāharaṇa) for the third member of the syllogism; although this had in fact become a genuine 'major premise'.

Dmnāga's Pramānasamuccaya and Prasastapāda's Bhāṣya on the Vaiśeṣika system are typical works of this period: and the relation between them has been the subject of long controversy. The former work is not extant in Sanskrit, and the fragments of it quoted by Vācaspati Miśra and others are not sufficient in themselves to settle the question of Dinnaga's relation to Vaišesika logic. Jacobi took the view that Buddhist logic derives from Vaiścsika. Stcherbatsky² on the other hand argued that Prasastapāda borrowed his logic from Dinnaga, and that he made rather disingenuous efforts to conceal his obligations. It is however clear that Dinnaga, in his attack on the Nyaya had a predecessor in Vasubandhu, whose criticisms of Naiyāyika doctrines are several times cited by Uddyotakara, and who is known from Chinese sources to have written specifically logical works. It has also been held with much probability that Praśastapāda had predecessors in commenting on the Vaiśesika system: though of this no definite evidence is forthcoming. The question is further complicated by the fact that a work attributed to Dinnāga by Tibetan tradition under the title Nyāyapraveśa, the teaching of which shows a similarity to the logic of Prasastapāda almost amounting to identity, is assigned

¹Indische Logik. Göttingen, Nachrichten, phil-hist.. pp. 458-482.

²in le Muséon, vol. v, 1904.

by Chinese tradition to another writer,—Samkara Svāmin, said to be a disciple of Dinnāga.

There is very close similarity between the logic of Prasastapāda and that of Dinnāga. Dinnāga's date shares the uncertainty attaching to that of his master Vasubandhu. He may fall anywhere between 400 and 500 a.d. Suali's opinion is that Dinnāga and Prasastapāda are almost contemporaneous', and that Vātsyāyana preceded² both. That Dinnāga' is later than Vātsyāyana is definitely proved—if any proof were needed—by the fact that the former writer ridicules the appeal to the methodological principle (tantrayukti) of tacit acceptance (anumata) as employed by Vātsyāyana in his commentary on NS I. i. 4. That Prasastapāda is later than Vātsyāyana becomes almost certain from a comparison of their logical doctrines', though no passage in the former work has yet been found which quite definitely refers to the latter.

•Although Uddyotakara writes with constant reference to the logic of Dinnāga, it is difficult to point to a passage in which he refers to the logic of Praśastapāda.

Suali, Introduzione allo studio della filosophia Indiana (Pavia, 1913),
 p. 424. Cited by Faddegon, Vaišesika Philosophy (Amsterdam 1918) p. 16.

²Snāli, p. 31, cited by Faddegon, p. 605. Bodas argued that Prašastapāda was earlier than Vātsyāyana, on the ground that the latter cites VS I. i. 4, and that this $s\bar{u}tra$ is later than Prašastapāda. But this is arbitrary. Faddegon's assumption that VS II. ii. 22, which Prašastapāda cites, was interpolated from $Ny\bar{u}ya$ -bhāyya p. 34 I. 10 is equally arbitrary, and cannot be ca ed a "decisive argument for Shali's orinion". But it seems certain that Vātsyāyana was earlier than Prašastapāda

³Dinnāga refers to and criticises views very like Prašastapāda's, See Vidyābhūṣaṇa HIL p. 279; fragment R of Dinnāga; Steherbatsky, Muséon, v. 170-171, cited by Keith ILA p. 27 footnote, who remarks "That Prašastapāda had predecessors is obvious, and it is from one of these doubtless that Dinnāga borrows the passages". The admission that Prašastapāda had predecessors weakens Steherbatsky's argument (1909) that Prašastapāda took his logic from Dinnāga; it is possible that both he and Dinnaga derived their common doctrines from these supposed Vaišasika predecessors of Prašastapāda.

⁴e.g. Praśastapāda's exposition of the notion of sāmānyato dṛṣṭa inference seems clearly to belong to a later phase of logical thought than Vātsyāyana's. The same is true of his formulation of syllogism.

It is easy to understand that he would tend to avoid reference in this connection: for nearly all the criticisms which he directs against Dinnaga would be applicable to Prasastapāda: and therefore he could not refer to the latter, in connection with logical topics, without attacking the sister-śāstra. But no one occasion, at any rate, where it was possible to show that Praśastapāda was right and the Buddhist logic wrong, he makes an undoubted reference.

His references to Prasastapāda's physical and metaphysical doctrines are detailed and indubitable². Indeed there are passages which must be read as commenting rather on Prasastapāda than on the $Ny\bar{a}ya^3$.

¹A passage in which Uddyotakara seems to contrast Praśastapāda's ¹ treatment of the topic of pratijnabhasa with the Bauddha treatment of it, to the advantage of the former. He says that 'sound is inaudible' is not a proper example of Proposition contradicted by Perception, whereas 'fire is not hot' is a proper example: and again that a statement, on the part of a Vaikesika, that sound is eternal, is not a proper example of Proposition contradicting Authority; whereas the statement 'a Brahman, should drink spirit' is a proper example. Now the two examples which he says are wrong are those given in the $Ny\bar{a}yaprave\acute{s}a$ (see $Vidyabh\bar{u}xana$, HIL p. 290-291); and the two examples which he says are right, are those given by Prasastapāda PBh p. 234). NV p. 117, on NS I. i. 33.

²See Keith ILA p. 26: "He is clearly referred to both in connection with the atomic theory and logical doctrine by Uddyotakara". Keith cites in support Jacobi, Encycl. of Rel. and Eth., I. 201, and Ind. Log. 484.—Ui, p. 17 n. 4, gives the following list of parallel passages :-

 $[\]overrightarrow{NV}$ p. 288 and PBh p. 288 (on sound).

NV pp. 319-320 and PBh^{3} pp. 11, 311 (sāmānya).

NV p. 320 and PBh pp. 14, 324 (samavāya).

NV p. 468 PBh p. 48 (śrsti).

NV p. 417 and PBh pp. 106-107 (rūpādīnām pākajotpattiķ).

³For instance, NV pp. 318-322 on NS II. ii. 61 is a defence of Prašastapāda's doctrine of sāmānya. As examples of detailed correspondence compare :-

NV p. 319 1. 3 sravisaye sarvatra vartata iti sarvagatety 'ucyate.

PBh p. 311 l. 13 svavisayasarvagatam. NV p. 319 l. 5 kva punar gotvam vartate? yatra gotvanimitto 'nuvrttapratyayo vartate.

PBh p. 311 1. 16 anuvrttipratyayakāranam.

NV p. 319 l. 16 yathā vastracarmakambaleşn nīlapratyayah. PBh. p. 311 1. 20 yathā parasparavišistesu carmavastrakambalādisv

ekasmān nīladravyābhisambandhān nīlam nīlam iti prutvayānuvrttih etc.

That later commentators attributed high antiquity to Praśastapāda¹, is shown by the fact that Vācaspati Miśra cites his words (*PBh* p. 308 l. 5) as *pāramarṣavacana* (*NVT* p. 458 l. 8)². *Praśastapādabhāṣya* was known to Dharmapāla (539—570 A.D.), and Paramārtha (499—569 A.D.)³. And there are said to be even earlier references to Praśastapāda in Buddhist writers, notably in Vasubandhu.

Stcherbatsky has recently admitted that the views which he put forward fifteen years ago—views which were strongly grounded in the evidence then available—must be revised in the light of further knowledge. He now makes three points:

(1) idealistic tendencies showed themselves again and again in various contexts in the course of Buddhist philosophy;

(2) the $s\bar{u}tras$ of the $Ny\bar{u}ya$ which seem to refer to the idealism of the $vij\tilde{n}\bar{u}nav\bar{u}da$ can be differently interpreted:

(3) we have positive proof of the existence of a systematic $Ny\bar{a}ya$ and Vaisesika long before Vasubandhu's time.

PBh. p. 324, l. 19. ayıtlasiddhänām ādhāryādhārabhī tānām yah sambandha ihapratyayahetuh, sa samavāyah.

Vindhyesvari Prasāda Dvivedin (Dube) in his preface to the Viz. Skt. Series edn. of PBh. adduces other evidence to this effect.

²I owe this reference to the list of identified quotations given by Gangādhara Sāstrī Tailauga in his edition of the NVT. He gives one other citation from PBh., viz., NVT p. 81 l. 27 - PBh., p. 259 l. 15 (definition of sulha).

³Ui, VP, pp. 74—79 and p. 18. ⁴Erkenntnistheorie und Logik nach der Lehre der späteren Buddhisten: übersetzt von Otto Strauss: München-Neubiberg, 1924. pp. 259— 266.

NV p. 322 1.3 katham tarhi gotram goşu rartate āśrayāśrayibhā
tena. kah tunar ūśrayūśrayibhāvah? samavāsah.
tatra vrtsimad sotram,—vrtsh samavaya dīkapratijayahetutvād ity uhtam.

⁽VS VII ii. 26 ihedam iti yatah kāryakāranayoh, sa samavānah. Uddyotakara's phraseology however seems to echo Frasastapāda rather than the sātra.—For a later objection see Kumārila Sl. Vārt., anumāna, 100, cited below p. 205).

He still holds that Vātsyāyana in the introduction to Nyāya-sūtra IV 2.26 interprets the sūtra as referring to an idealist opponent, and he accepts the supposed reference as the true interpretation of the sūtra: but he now believes the reference to be to an older idealism, and not to that of Vasubandhu. "The Vijñānavāda is as old as the Sūnyavāda, or perhaps considerably older". He therefore now accepts (though on different grounds) Jacobi's statement—"We are therefore almost certain that two sūtras at least, N. D. and V. D., preceded the origin of the Vijñanavāda, or rather its definite establishment";—the 'definite establishment' of the Vijñānavāda being understood to refer to the foundation of it on a logical basis by Vasubandhu.

In connection with his third point—"that the Nyāya-Vaiścsika system is considerably older than the later (epistemological) vijñānavāda", Stcherbatsky states that Vasubandhu himself deals with Vaiścsika views on the existence of the soul, and that he cites the definition of samyoga, not in the words of the Vaiścsika sūtra (III.ii.22), but in the phraseology of Praśastapāda (PBh. p. 139–1. 18 aprāptayoḥ praptiḥ samyogaḥ). He is not prepared to suggest that both Praśastapāda and Vasubandhu derive from an older source. He further cites Ui's statement (Vaiścsika Philo-

^{**}NBh p. 233 i. 6--Yad idam bhavīn buddhīr āśritya buddhiviṣayā santīti manyate, mithyā buddhaya etāh.--- As for your (the Naiyāyika's) reliance on thought, and your (consequent) statement that the objects of thought exist,—the answer is that these thoughts are illusory ". Steherbatsky however misreads bhāvān for bhavān in the first clause, and translates: Wenn aber du da glaubst dass es Objecte auch dann wirklich gibt wenn man an dem Grundkatz festhālt dass alles Existic ende (bhāvān) blosse Vorstellung (buddhīr) ist, so (ist dir entgegenzuhalten dass) diese (deine Vorstellungen) falsche Vorstellungen sein würden ". (op. cit. p. 262).

Even if $bh\bar{a}v\bar{a}n$ were the correct reading this appears to be, linguistically, a very improbable interpretation of $ch\bar{a}:\bar{a}n$ budz $h\bar{i}r$ $\bar{a}\acute{s}ritya$. I do not believe that there is any reference to an idealist here,—in spite of Vācaspati Miśra.

sophy, p. 73) that Vasubandhu in the Buddhagotraśāstra refutes a Vaiseṣika doctrine of sound as comprising three moments, a doctrine which is not found
in the Vaiseṣikasūtra but only in the Bhāṣya.
"Praśastapāda is evidently its originator"."

From these facts he draws the conclusion that Praśastapāda was either a predecessor or a contemporary of Vasubandhu. The problem of the relation between Vaiśesika and Buddhist logic, therefore, has now assumed for him an entirely different form. It is no longer a question whether Praśastapāda borrowed his logic from Dinnāga, or vice versa. The suggestion now made is that Vasubandhu made use of Praśastapāda's logic, and that therefore Dinnāga's logic is derived through Vasubandhu from Praśastapāda. This however assumes that there was no development in the Vaiśesika school between the Sūtra and Praśastapāda,—an improbable assumption.

The date of Vasubandhu. If the date of Vasubandhu could' be determined it would provide an invaluable fixed point for the determination of other dates. Unfortunately it remains controversial. Takakusu,² basing his argument on the biography of Vasubandhu by Paramārtha, came to the conclusion that he lived 420—500 A.D. This was generally accepted until Noel Péri³ advanced strong reasons for carrying the date back a century and a half earlier. Vincent Smith⁴ and Keith⁵ accept Péri's

 $^{^{1}}$ Steherbatsky, German Transl., p. 265. The reference is to PBh. p. 287. Hawing now come to regard Prasastapāda as an original thinker, he inclines to the view that his logic also is not a borrowed thing.

²On the Date of Vasubandhu, JRAOS 1905; and Bulletin de l'École Française de l'Extrême-Orient, 1904, p. 37.

Bulletin de l'École Française de l'Extrême-Orient, 1911, pp. 339 ff.

 ^{*}Early History of India, 3rd edn., pp. 328-334.

⁵Buddhist Philosophy, pp. 155-6.

conclusions; but Stcherbatsky¹ considers that they are based on the false assumption that there was only one Vasubandhu, whereas in fact there were two,—if not three,—famous persons of this name. One was the great Vasubandhu, a Hīnayānist 'Vrddhācārya Vasubandhu' who is often cited in Vasubandhu's Abhidharamakośa. A later Vasubandhu,—commonly called 'the Bodhisatt'a Vasu'—, was a Mahāyānist author of a commentary on Āryadeva's Śataśāstra: Takakusu's date is the probable date for him.—Until this controversy is decided, it is useless to build up an absolute chronology round the date of Vasubandhu as a fixed point.

SECTION 4. UDDYOTAKARA AND DHARMAKIRTI.

Uddyotakara must have been either contemporary with or prior to the novelist Subandhu, who speaks

¹Buddhist Epistemology and Logic, German translation, note 420, p. 289. See also Central Conception of Buddhism, 1923, p. 2, note 2, where Steherbatsky writes: "That there were two Vasubandhus is not 'a guess with no solid basis': the Kośa actually quotes the opinions of vrddhācārya Vasubandhu and rejects them (i. 13, Tibetan text p. 23; cf. Yasomitra's comment)". Keith, loc. cit., says that Yasomitra's comment can be read to mean that the author of the Abhidarmakośa refers to Vasubandhu, brother of Asanga; but that this suggestion is on the whole implausible. Steherbatsky goes on: "There remain the dates of the Chinese translations of Asanga and Vasubandhu, which alone, if correct, would be sufficient evidence to assign them to the fourth century. Otherwise one feels inclined to bring Vasubandhu nearer to Dinnaga, whose teacher he was ". According to Takakusu all the works certainly attributable to Vasubandhu were translated into Chinese between 508 and 569. There is a $\hat{s}ata\hat{s}\bar{a}stratik\bar{u}$ translated in 404, which is of doubtful authorship. Stcherbatsky appears to assign this to the Vasubandhu for whom he accepts as the most probable date that assigned by Takakusu i.e. 420-500. That is why he suggests a doubt as to the accuracy of the Chinese statement that it was translated in 401 (if I understand him aright). Péri's argument rests partly on this, but entirely.

The Vasubandhu with whom we are concerned is the logician referred to by Uddyotakara, and the author of the Tarkaśāstra assigned to 'Vasubandhu'. He was traditionally the teacher of Dinnāga.

of him by name in his Vāsavadattā¹. Subandhu in turn is complimentarily referred to by Bāṇa, who writes as a youthful poet in the later years of Harsa (604-648) at Thanesar, and is apparently paying a compliment to Subandhu on the recent production of his Väsavadattā. It may be similarly conjectured that Subandhu (writing perhaps about 640 A.D.) is honouring a philosopher still living at the court of Harsa when he speaks of the stability of the $Ny\bar{a}ya$ as being embodied in Uddyotakara.3. And the latter conjecture finds some confirmation in a chance phraseused by Uddyotakara in the *Vārtika* (p. 113): 'this road leads to Srughna'. For, as Vidyābhūṣāṇa points out, Srughna was only forty miles distant from Thanesar, and must from its position have been important stage for travellers to or from Thanesar4. It is not improbable therefore that Uddyotakara lived at Thanesar in the reign of Harsa.

Uddyotakara himself tells us that his commentary is intended to put an end to the misunderstanding of Akṣapāda's teaching which had been brought about by bad logicians (kutārkika): and Vācaspati Miśra explains that these bad logicians are Dinnāga and others. It has been held that the Bauddha logician Dharmakīrti was a contemporary of Uddyotakara and is, referred to in the Nyāyavārtika as the author of a Vādaridhi and a Vādaridhānatīkā which Uddyotakara, mentions by name. But

³Nyāyasthitim ivoddyotaļarasvarūpām. ⁴Vidyābhūṣaṇa says: ¹³It was very probably this route by which Hiuen-thsang reached Srughna A.D. 635''.

 ^{*}See the introductory stanza to NV, and VVT's comment thereon.
 *Vidvābhūṣana, H.I.L. p. 124: Keith, I. L. A., p. 28. JRAS 1914
 pp. 601—606 and 1102-3.

^{• &#}x27;NV' p. 121 l. 2, p. 120 l. 6-7. See also p. 156 l. 17 with Jha's emendation: and p. 159 l. 3, where the "granthakāra" and "bhāṣyakāra"

there are reasons for identifying the $V\bar{a}da$ -vidhi with a work which Chinese tradition asserts to have been composed by Vasubandhu and of which Hiuen-tsang—a contemporary of Uddyotakara—tsays that he saw a copy during his travels in India. No other reference by Uddyotakara to Dharmakīrti and his works has been adduced: and there are positive indications that, although Vācaspati Miśra frequently extends the application of Uddyotakara's arguments against Dinnāga so as to make them bear upon Dharmakīrti's statements, Uddyotakara himself was either unaware of or else ignored Dharmakīrti's views. Vācaspati Miśra is careful to point out that Uddvotakara's criticism of Dinnaga's definition of perception would not be applicable to Dharmakīrti's revised statement, though it is applicable to Dinnāga's'. If Uddyotakara had been aware of a revised form of the Bauddha doctrine to which his criticism did not apply, it is likely that he would have supplemented or modified his arguments. Besides the chronological indications are that Dharmakirti was rather later than Uddyotakara². He is not mentioned by Hiuentsang (629-645 A.D.), but is spoken of by I-tsing (671-695 A.D.) as having introduced reforms in logical theory. Vidyābhūṣaṇa finds a reference to the, Nyāyavārtika in his Nyāyabindu, but this is doubt ful^3 .

may refer to the author of the vādavidhi and the author of the vādavidhāna-

³H. I. L. p. 124, citing NB chap, III pp. 110-111. Also H. I. L. p. 306, citing K. B. Pāthak's Bhartrhari and Kumārila in J. B. B. R. A. S. 1892 vol. xviii p. 229,—'according to the Jaina Slokavārtika Uddyotakara is attacked by Dharmakirti".

tikā. See Fragments from Dinnāga, pp. 26—28.

See Fragments from Dinnāga, Fragment A, p. 8; NVT p. 102 1. 17.

²Ui's conclusion, VP pp. 17-18. Tradition says that when Dharma-kīrti was converted to Buddhism he was admitted into the priesthood by Dharmapāla. If this is reliable, and if Ui's date for Dharmapāla is correct, viz., 539-570 (VP. p. 10 n. 4), then Dharmakīrti would be earlier than Uddyotakara. But Tibetan tradition is different as to Dharmapāla's date, and Vidvābhūsana places him c, 635 A.D.

Dharmakīrti's Nyāyabindu is a brief work, and, although its recognised importance is shown by the commentaries written upon it,1 the attention which it has attracted is partly due to the historical accident that it has survived in Sanskrit. For it is after all no more than a manual, and cannot be compared for philosophical interest with the monumental works of Uddyotakara and Vācaspati Miśra. Uddyotakara's Nyāyavārtika is on the other hand one of the world's great treatises on logic; though its greatness tends to be obscured by the atmosphere of incessant and often hyper-critical polemic in which it has its being, and which makes it a matter of considerable difficulty to •discover what its author's positive doctrine is. Vācaspati's phraseology² suggests that it had become obsolete even in his time, two centuries after its composition: and it seems clear that it failed to achieve that nyāyasthiti, or establishment of the ancient tradition of the Naiŷāyika school as against the innovating logic of

The Nyāyabinduṭīkā by Dharmottara, edited in the Bibl. Ind. edn. of the Nyāyabindu, P. Peterson: also a tippaṇī edited in the Bibl. Buddh., St. Petersburg, 1909. Peterson, who discovered and published the Nyāyabindu in 1889, did not know that Dharmakīrti was its author. This was established by Pāthak in JBRAS 1894, vol. xviii p. 88 ff. and p. 213 ff. Cf. Jacob in JRAOS 1905 pp. 361-2. Vidyābhūṣaṇa identifies its Tibetan version, H. I. L. p. 309.

[&]quot;NVT p. 1, introductory verses 5-6:—icchāmi kim api punyam dustara-kunibandha-pankamagnānām Uddyotakaragavīnam atijaratīnām samuddharanāt—"I look for some merit from rescuing the aged doctrines of Uddyotakara from the treacherous swamp of bad commentaries in which they were sunk". Udayana in NVTP p. 9 makes an objector say that the tradition (sampradāya) was broken after Uddyotakara, and that therefore Vācaspati's comment cannot claim to be a good comment—sunibandha—as opposed to these bad commertaries—kunibandha. Vācaspati is made to reply that the clixir of the teaching received from his preceptor Trilocana has restored the youth of the tradition: Trilocanaguroh sakāšād upadešarasāyanam āsāditam amāṣām punarnarībhāvāya dīyate. This is a clear indication that there was an uneasy consciousness of a break in the continuity of the teaching of the school after Uddyotakara.

the Vaisesika and Bauddha schools, which it was Uddyotakara's professed object to achieve. In the two centuries which followed logic fell into the hands of eclectic logicians, and the pure Naiyāyika stradition may perhaps be said to end with Uddyotakara.

SECTION 5. KUMARILA AND VACASPATI MISRA

There is no logic in the Mīmāmsā-sūtra; but a theory of knowledge and the beginnings of logic proper are to be found in the tarkapāda of Sabara's Bhāṣya thereon; that is in his comment on Mīmāmṣāsūtra I.i. Sabara's date is uncertain. question is complicated by the fact that most of his logical teaching is given, not as his own, but in the form of citation of a long passage from an earlier anonymous commentator, the 'vṛttikāra.' This passage polemises against a doctrine which is not the developed idealism of the vijnānavāda. It seems to be much the same as that attacked in the Vedantasūtra and the Nyāya-sūtra, though perhaps the idealistic moment in the argument is more prominent than it is in the theory attacked by the Nyāya-sūtra. Keith concludes that the Vrttikāra² is probably not later than the fourth century A.D.1. The language used sometimes suggests acquaintance with the Nyāyasūtra; and the logical conceptions are certainly considerably earlier than those of Prasastapada, and possibly rather earlier than those of Vatsyayana. Sabara does not seem to be separated from the Vrttikāra by any considerable interval: and a date in the neighbourhood of 300 A.D. may be provisionally assigned to both writers.

 $^{^{1}}Karma$ $M\bar{\imath}m\bar{a}ms\bar{a}$, p. 7. The passage in Sabara is dealt with infra in the chapter on Perception:

The beginnings of logical theory here laid down developed into two Mīmāmsaka schools: the Prābhākara, based on the Brhatī commentary on Sābarabhāsya by Prabhākara, to whom a date about 600-650 A.D. has been assigned: and the Bhātta school, which derives its name and doctrine from Kumārila Bhatta, whose Slokavārtika or verse-commentary on the tarkapāda of Sabara's Bhāsya is one of the most famous and the most frequently cited of Indian philosophical works. Kumārila cites and criticises Bhartṛhari,² the philosophical grammarian and author of the Vākyapadīya, who is also cited by Vācaspati Miśra. Bhartrhari is stated by I-tsing, the Chinese traveller who was his later contemporary, to have died in 650 A.D. Kumārila is himself cited and critised by Samkarācarya³: Samkara's date (after much controversy) seems to be fixed in the neighbourhood of 800 A.D. On these grounds the date 700-750 has been assigned to

¹Keith, Karma Mīmāmsā pp. 9-10, and note 2 to p. 9. Gaugānātha Jhā published an account of the doctrines of the school in his Prābhākara School of Pūrra Mīmāmsā, Indian Thought, vol. II, 1910 (Allahabad), which still remains (I believe) the sole source of knowledge of that school. The Brhatī itself follows on a Vārtika (not that of Kumārila) which Dr. Jhā regards as the source of the Prābhākara school. Dr. Jhā argues that Prabhākara is earlier than Kumārila: and rejects the tradition which makes the former a pupil of the latter. PSPM pp. 10—17. But the question has been re-opened by K. S. Rāmaswāmy Sāstry Sironani in his papers on Kumārila and the Bṛhatṭīkā, and on Forgotten Kārikās of Kumārila, read before the Third Oriental Conference (Madras, 1924) and the Fourth Oriental Conference (Allahabad, 1926).

Further examination of the Brhatī on Adhyāya I pāda i would certainly throw fresh light on the development of logical conceptions. A MS of the Brhatī is in possession of the Bengal Royal Asiatic Society. It is not clear from Dr. Jhā's account how much of the doctrine is to be found in the Brhatī itself, and how much in the commentators on it.

 ²See Pāthak's Kumārila and Bhartrhari, in JBRAS vol. xviii, 1892,
 p. 213 ff. The reference is Kumārila's Tantravārtika 1. i. 3.

³Pāthak notes the citation by Šurešvara in his Taitirīyavārtika (Ānandāśrama edn. p. 5) of a couplet from Ślokavārtika, the section called sunābandhākṣepaparikāra, verse 110 (Caukh. edn. p. 671). Surešvara is commenting on a passage in Śankara's Taittirīyabhāṣya which appears to paraphrase the couplet from Kumārila. Pāthak says that Sankara also refers to Kumārila in his Sārirakabhāṣya, Ānandāśrama edn. p. 285.

Kumārila, and this may be accepted as the nearest approximation at present possible. His logic owes much of its detail to Praśastapāda and to Dinnāga, the latter of whom he criticises; and he seems to refer also to Uddyotakara. The most noteworthy feature in it is his emphasis upon the part played by the universal (sāmānya) in inference, and his quantitative formulation of the relation of the major, and middle terms in the syllogism as vyāpya (gamaka) and vyāpaka (gamya). In these respects he only carries further doctrines already contained in Praśastapāda, and he probably had much to do with the introduction into later Naiyāyika logic of elements in Praśastapāda's logical doctrine which Uddyotakara rejected. His logical doctrine is very much that of the 'classical' Nyāya: and the frequency with which his Slokavārtika is cited by Vācaspati Miśra and Srīdhara' is an indication of the influence which that work had on later writers on Nyāya.

Vācaspati Miśra gives us his own date in the closing verses to his $Ny\bar{a}yas\bar{u}c\bar{\imath}nibandha$,—his 'edition' of the $Ny\bar{a}ya$ $s\bar{u}tra$, arranged into prakaranas or topics:

nyāyasūcīnibandho 'sāv akāri sudhiyām' mude \$rīvācaspatimiśrcna vusvankavasuvatsare.

Vasvankavasu means 898. But what era is intended?

If it were the Saka era, the date given would be equivalent to 976 A.D., which is too late, seeing that Udayana, who wrote the Nyāyavārtikatātparyapari-śuddhi—a commentary on Vācaspati's Nyāyavārtikatātparyaṭīkā—, again gives us his own date as 984

¹Gangādhara Sāstrī notes seven quotations from the S¹okavārtika and two from the Tantravārtika in his edition of the NVT. Faddegon (Vais. System, p. 601) identifies in Srīdhara's Nyāyakandalī twelve quotations from the Slokavārtika and three from the Tantravārtika.

A.D.1, and an interval must be supposed between the two commentaries. For this and other reasons² the year 898 must refer to the Vikrama era, and must be understood as equivalent to 841 A.D.—Vācaspati Miśra was a doctor of many philosophies. He gives us a list of his own works in the closing verses to his Bhāmatī or commentary on Samkara's Sārīrakabhāsya. The list there given is (1) Nyāyakaņikā (2) Tuttvasamīksā (3) Tattvabindu (4) a commentary on Nyāya (5) a commentary on Sānikhya (6) a commentary on Yoga (7) a commentary on Vedānta. The four latter commentaries—nibandha—are no doubt the Nyāyavārtikātātparyaṭīkā; the Sāmkhyatattvakaumudī; the Tattvavaiśāradī, on the Yoga; and the Bhāmatī itself. The last mentioned is of course the latest-written of these seven The Nyāyakanikā, a gloss on Mandana Miśra's Vidhivivcka (on the Mīmāinsā), is mentioned in the $Ny\bar{a}yav\bar{a}rtik\bar{a}t\bar{a}tparyat\bar{\imath}k\bar{a}^2$, as is also the samīkṣā¹.

The Nyāyavārtikatātparyaṭīkā itself is mentioned in the Sāmkhyattvakaumudī⁵. We are thus able to fix the order of Vācaspati's works to this extent, that (1) and (2) in the above list preceded (4), that (4)

¹At the end of the Lakṣaṇāvalī : tarkāmbarānkapramitesv atītesu šakāntatah varṣeṣūdayanaš cakrē subodhām Lakṣanāvalīm.

This is cited by Gangādhara Sāstrī in his preface to NVT, together with the couplet from the Nyāyasūcīnibandha. He argues convincingly that Udayana's preliminary invocation proves that Vācaspati was much earlier than Udayana, and concludes that Vācaspati's 898 must refer to the Vikrama era, and so be read as 841 a.d. He does not mention the tradition that the rājavārtika mentioned by Vācaspati in the Sāmkhyatattrakaumudī, was written by Bhoja Raja (1018—1060),—presumably ignoring it as worthless. It must certainly be disregarded in face of his argument.

^{*}Keith, ILA, pp. 29-30; Woods, YS, pp. xxi-xxiii.

^{*}vipancitan caitad asmablir Nyāyakanikāyām. NVT p. 395 1. 16
*dinmātram atra daršitam, prapancas Tattvasamīkṣāyām asmābhih
kṛṭaḥ. NVT p. 57 1. 28. The doctrine here raferred to as expounded at
length in the Tattvasamīkṣā is the theory of error in its five possible forms.
This passage of the NVT is translated here, infra, chapter I section 5.

Stated by Gangādhara Sāstri, in the brief but very valuable preface already referred to.

preceded (5), and that (7) was the latest of all. It is not unreasonable to conjecture that (6), the commentary on Yoga, was written after (5), the commentary on Sāmkhya: so that the list of his works which he gives follows the order in which they were written. He does not mention the Nyāyasūcīnibandha, probably because that was a mere appendix to his commentary on the Nyāya: in which case we may fairly infer that 841 A.D. is the date of the earliest of his four great commentaries. We must then allow at least a period of ten years, if not more, between this date and the date of his commentary on Samkara's Bhāṣya, which would therefore have been composed after 850. This conclusion removes a certain difficulty by widening the interval of time between Samkara and his commentator.

As regards the remaining two works, the Tattvasamīksā would seem to have been a Vedantist work in which the nature of truth was dealt with, while the Tattvabindu treated of Kumārila's teachings.

Six of these seven works are not only extant but available in modern editions¹—a rare fate for an Indian philosopher. Vacaspati Miśra admits that his logic contains innovations, notably in respect of his doctrine of såvikalpaka and nirvikalpaka percep-This he attributes to his teacher. Trilocana. who must have flourished about 800 A.D., but about

The Nyāyasūtras, is attributed by Keith (ILA p. 29) and Woods (Y.S., p. xxii n.) to our Vācaspati Miśra. But Vidyābhūṣana (HIL, p. 460) attributes it to the much later writer of that name who lived about 1450 a.p. This would dispose of the conclusion drawp from the colombon of this work that our Vacaspati Misra was a native of Mithila.

The Nyāyakanikā with the Vidhiriveka was issued as a reprint from The Pandit, Benates, 1907. (The Pandit, XXV—XXVIII, 1903—1906): the Tattvabindu similarly, 1892 (editor, Gańgādhara Sāstrī Tailanga). The Tattvasamīkṣā, so far as I know, has not been published. NVT in Viz. Skt. Series, 1898. The Sāmkhyatattvakaumudī, Benares, 1889. The Tattva-

whom we know little beyond what Vācaspati tells us¹. Udayana appears to generalise this into the statement that Vācaspati used the teaching of Trilocana to rejuvenate the Naiyāyika school, the tradition of which was in its prime in the time of Uddyotakara. The renovation was carried out in an electic style which owes much to Praśastapāda, as well as to the Bauddha and Mīmāmsaka logicians whom the new school continued to combat. But it was not 'modern'.

It would be difficult to point to any doctrine in the $T\bar{a}tp\bar{a}ryat\bar{i}k\bar{a}$ which does not derive from the earlier schools. It is with Udayana that new conceptions begin to appear. A survey of the logic of the older schools rightly ends with Vācaspati.

^{&#}x27;See the note on Trilocana, miga (footnote 1 p. 106).

CHAPTER I

TRUTH

Value of truth—Validity—svataleprāmānya and parataleprāmānya—Negative judgment—Conditions of possibility of error—Five theories of error (translation of NVT, pp. 54—57):—(i) Error as apprehension of the merely subjective. ātmakhyāti. (ii) Error as apprehension of the non-existent. asatkhyāti. (iii) Error as apprehension of what neither is nor is not. anirvacanīyakhyāti. (iv) Error as non-apprehension. akhyāti. (v) Error as the apprehension of things otherwise than as they are. anyathākhyāti.

The problems raised in this and the following chapter are epistemological. What is our guarantee that we really know when we think that we know? How is it that error is possible if the nature of knowledge is such that de jure the object of cognition is reality itself? If error presents 'false objects' to the mind, is it not a possible hypothesis that the objects of perception are as unreal as dreams? As a matter of fact is it possible to give an intelligible account of the object considered as real, and does it not dissolve under intellectual analysis? And finally is not the perceptual process itself such as to suggest that the object, with which it supposes itself to be in immediate contact, is in fact a complex of fictive elements substituted by the imagination for the thing-in-itself?

These are still the problems of modern epistemology, and the spirit and method in which the Indian philosopher approaches them are in no important

respect different from, but in all essentials quite parallel with, the spirit and method of contemporary philosophy. It is easy to abuse the comparative method in interpreting ancient thought; and the student of Indian philosophy has to be constantly on his guard against a tendency to confound differences which is the most insidious enemy of a sound and scholarly understanding. But it does not follow that, because the comparative method has been widely abused, no use can be made of it. And it is perhaps in these problems of epistemology that the use of the comparative method is most enlightening. I therefore make a few observations here on some of these problems as they present themselves to modern thought, by way of introduction to the Indian discussions of them.

The so-called 'problem of knowledge' of modern epistemology has arisen from the view that the mind knows reality through the medium of its ideas: from which it seems to follow that the direct object of the mind is its own ideas. Locke therefore defined an idea as the object of the understanding when a man thinks. From this it is a natural step to Berkeley's principle esse is percipi: for it seems useless to suppose the existence of things 'outside the mind', seeing that we are confined within the circle of our own ideas, which on Locke's account of the matter, are the objects of the mind. Nor does there seem to be any way out of the difficulties thus arising, so long as we accept Locke's 'way of ideas'. Reid saw this, and therefore asserted the fundamental position of a realistic, as opposed to an idealistic, epistemology, that we apprehend reality directly and not through the medium of ideas. The idea, as a tertium quid between the mind and things, is therefore denied to exist. Similarly the starting-point of contemporary

realism is perhaps Moore's article entitled 'A Refutation of Idealism' which simply denies the self-evidence of the Berkeleian principle esse is percipi. The realist, on the contrary, asserts the self-evidence of the contradictory principle—esse is not percipi. The essence of knowledge is that the object of the mind when a man thinks is the real itself, and not his own 'ideas'. There is then no problem of knowledge.

Unfortunately there is a problem of error, on the realist theory of knowledge, just as there is a problem of *knowledge on the 'idealist' theory. In fact it can fairly be said that error is impossible for the realist, and truth for the idealist. As soon as the *realist admits, even in a single case, the presentation of a false object to the mind, he is back again at the admission from which the idealistic hypothesis starts: for if an object is unreal it would seem inevitable to admit that its asse is percipi. And yet it has all the stubborn objectivity of a real object: and if objectivity is in even one case not a guarantee of reality, how can we be sure that it is a guarantee of reality in any case? Thus the modern realist finds himself forced back upon the paradox of the akhyāti-vāda, the Mīmānisaka theory of error,—that error is merely negative, an absence of apprehension: and that every object apprehended is entirely real—although it is not the entire reality. Sarva eva pratyayā yathārthāh. He will also hold the Mīmāinsaka view of validity, that cognitions are self-evidently true (svatah-prā-Similarly, the Mīmāmsaka is at one with

 $^{^{1}{\}rm G}.$ E. Moore in MIMD n. s., vol. xiii, 1904. Reprinted in his Philosophical Studies, London, 1922.

²The terms objectivist and subjectivist would be preferable, if we could depart from the accepted opposition of realist and idealist. At any rate I mean by 'idealist' subjectivist.

[•] There will of course be no distinction between truth and error for the idealist, so that error also is impossible for him.

the modern realist in denying that thoughts are 'presentations' (anākāram jnānam)'—there are no 'ideas' in Locke's sense. But it is no easy matter to explain mere failure to apprehend². And the error อร Naiyāyika (who takes up the position of modern 'critical realist') seems therefore to have the better of the argument with his view that error is positive misrepresentation or seeing things wrong $(anyath\bar{a}khy\bar{a}ti-v\bar{a}da)$. This is the common-sense view that some of our objects are real and some are false. But it is difficult for realists of this school to avoid the admission that in some cases at any rate the idealist's account is right and that the mind has the faculty of projecting its own ideas under the guise of external reality (ātmakhyāti-vāda); and seems to debar us from admitting the self-evidential nature of even true cognitions (svatah-prāmānya), since both true and false cognitions are equally objective, so that it will be impossible to distinguish between them-unless by some criterion extrinsic to the cognition (paratah-prāmānya), an unsatisfying doctrine which the Naiyāyika is therefore compelled to maintain, though without laying too much stress upon it. But, whatever may be the difficulties of the two 'objectivist' or realistic theories of error discussed by Vācaspati, he puts the realistic 'refutation of idealism' in a way which any modern realist would approve when he asserts the inherent objectivity of what we apprehend and raises the searching question "whence comes this notion of the ideality of the apprehended object"?

¹P. 96 infra.

²As Alexander candidly admits. Space, Time and Deity, vol. ii, p. 199, "I cannot help admitting how much simpler it would be and how much laborious explanation it would save if only it were true that our intuitions and sensations were mental as is commonly supposed".

³P. 59 infra-svākāram bāhyatayā 'lambante vibhramāḥ.

SECTION 1. VALUE OF TRUTH

The Nyāya-sūtra gives no definition of truth. In the three opening sūtras¹ it says that the attainment of the Summum Bonum results from knowledge of the real nature or truth (tattra) of the sixteen topics (padārtha)² of the system: that release (apavarga) from the cycle of birth and rebirth results from the absence, following upon such knowledge of truth, of the series error—defect—activity—birth—pain³, there being a successive disappearance of these when truth is known: and that perception, inference.

¹Known collectively as the trisūtrī—see colophon at p. 11 of NBh. But according to Vāca pati Miśra's division of the śūstra in his Nyāyasūcīn-bandha, the first two sūtras form one prakaraņa or section, while the third belongs to the second prakaraṇa (consisting of sūtras 3—8 and dealing with the topic of the definition of the pramāṇas).

²Enumerated in this sūtra as: instruments of knowledge; objects of knowledge; doubt: motive: example: established tenet; members of the syllogism; indirect reasoning (reductio ad impossibile): certitude; discussion; disputation; eristic; fallacions middle terms; equivocation; sophistical refutations; occasions of reblike i.e. of defeat in argument.

These are in no sense 'categories', but rather a list of the contents of the kāstra. The Naiyāyika of course does not suppose that a knowledge of the logical notions, which form fifteen out of these sixteen 'categories', constitutes the soul's salvation: but he is convinced that bad logic will incur damnation. The knowledge that constitutes salvation is knowledge of certain topics that fall under the category of 'objects of knowledge', notably the topic of the nature of the soul. The other fifteen categories constitute the equipment for getting and guarding right knowledge of this. So Vātsyāyana says: ātmādch khalu prameyasya tattvajhānān niḥśreyasādhiyamah—the attainment of the highest good results from knowledge of the true reality of such objects of knowledge as the soul (NBh. p. 2.1.16 on NS. I. i. 1). And he claims that the nyāyašāstra is the ānvīkṣikī vidyā traditionally spoken of as fourth among the branches of knowledge—(a) the three vedas (b) the science of wealth (c) politics, of the art of kingship (d) ānvīkṣikī vidyā (NBh. p. 3.11.5-6). Without its treatment of the logical categories the Nyāyašāstra would be just like the Upaniṣads i.e. it would be knowledge of the true self (adhyātmavidyāmātram iyam syād yathofaniṣadah). The Nyāya is therefore a system of applied logic: and its application is to the ontological problem of the soul.

Vātsyāyana is aware that the sixteen topics involve a cross-division e.g. the second 'category' includes all the rest. This is no objection in a list of contents,

³These constitute samsāra, the cycle of existence. NBh. p. 8 l. 16 ta ime mithyājūānādayo duḥhhāntā dharmā avicchedenaiva pravartamānāh samsāra iti. Only right knowledge can make a break (viccheda) in the vicious circle of being.

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'analogy' and testimony, are the means of knowing truth $(pram\bar{a}na)^2$. The introductory, portion of

This is not a rendering, but a symbol, for upamāna, the meaning of which is interpreted below, p. 312 ff.

²For the varying enumeration of the 'instruments of knowledge

in the different schools, see below p. 305 and footnote.

'Testimony' is fundamental in the $Ny\bar{a}ya$, as in all the orthodox philosophies. (It is true that the Vaišeșika school nominally rejected testimony as a separate instrument of knowledge, reducing it to inference. But as the inference to which testimony is thus reduced is not as inference which tells us anything about the matter testified, but only an inference from the credibility of the witness, there is no practical difference between the attitude of the Vaišesika and that of the other schools to scriptural and canonical authority). Vātsvāyana explicitly says that the 'investigation', anvīksā, in virtue of which the sastra claims to be anviksiki vidya, is inference supported by perception and testimony. The 'nyāya', or method of demonstration from which the system takes its name, is certainly not pure reasoning. "What is this nyāya? It is the investigation of a thing by the instruments of knowledge-pramānair arthaparīkṣaṇam nyāyah". (And testimony is one of the pramanas, which is admitted specifically to a position as one of the members. or avayava of the demonstration, in the Proposition or pratifua, the preliminary statement of the conclusion. The mere statement of the probandum is in fact part of the ground for accepting it; in a genuine nyāya: for, as Vātsyāyana elsewhere says, āgamah pratijūā—the Proposition is authoritative testimony. The other 'members' merely follow up and explicate this authority-generated knowledge. And so the present passage goes on :--) " Inference relying on perception and testimony is anviksa, investigation: that is, the anviksana or after-apprehension of something that has already been 'iksita', apprehended, by perception and testimony. The Nyāyakāstra functions through this sort of 'anvīkṣā' or investigation, and so constitutes 'ānvīkṣikt vidya", the science or art of investigation. (But) inference which contradicts perception or testimony is fallacious demonstration (nyāyābhāsa)". However impeccable an inference may appear, judged by the canons of unorthodox logic (e.g., by the trairūpya of the Buddhist logic), it is still bādhita, null and void, if it contradict authoritative testimony. (NBh p. 3) 11. 14-17).

Uddyotakara is even more explicit, if possible, than Vātsyāyana. "The characteristic of the sāstra is exposition of the truth about a thing which transcends perception or reasoning.... When people rely on contact of object with sense, they (apprehend truth) through perception: when they rely on experience of a middle term and on memory (of connection between the middle and the major) they apprehend it by inference; but when they rely on authoritative instruction (upadeśa) then the sāstra comes into play". NI p. 21, 3 and 1, 7.

It might seem that Indian philosophy of the orthodox schools, starting thus from foregone conclusions, must be a system of dogmatism of little interest to those who do not accept the scriptural er canonical authority on which it is professedly based. But this is in fact far from being the case. The orthodox schools had the advantage of facing, in Buddhism, a vigorous opposition which pressed free enquiry to the extreme limits of scepticism. These opponents outside the fold had to be met with their own weapons, which were perception and inference. The fortunate result was that the trammels, of authority do not prevent the Indian thinker from following where the argument leads.

Vātsyāyana's comment on the first sūtra embodies, however, three sūtra-like 'sentences' $(v\bar{a}ky\bar{a}ni)^{1}$ which seem to raise the problems of the criterion of truth and of the nature of the object of knowledge in a specific form. In the commentators' observations on these sentences', and on the second $s\bar{u}tra$, a more developed answer can be found to the question What is truth?,—and, more particularly, to the question What is error? If there were no error, there could hardly arise any 'problem of truth': and it is in the difficulty of explaining error that the problem of the nature of truth first arises. 'Thus Vācaspati Miśra (on NS I. i. 2) enumerates five theories of error, and refutes four of them'.

SECTION 2. VALIDITY, SVATAHPRĀMĀŅYA AND PARATAHPRĀMĀNYA

The first of the three $v\bar{a}kyas$ is as follows:—

i. pramāṇato rthapratipattau pravīttisāmarthyād arthuvad pramāṇam.

"Knowledge gets at the object: because the capacity of practical activity to achieve its object is condi-

The commentators are unanimous that these are not sūtras. Vācaspati Miśra calls them bhūṣyasya vākyam, which seems to imply that he attributed them to Vātsyāyana. There are other passages of the Bhūṣya in which similar vūkyas are found, and in certain cases there was difference of opinion as to whether they were sūtras or not. The editor of the Vizianagram Skt. Series text, Mm.' Gangādhara Sūstrī, prints them in special type, in deference to the opinion of western scholars (pūścūtyūnūm matena) who 'argue that someone wrote a vūrtika between the time of the sūtra and that of the bhūṣya . . . juṣt as in the case of the Pūṇinean grammar Kātyāyana came between the time of the sūtra and that of the bhūṣya : and that these sentences are citations from this vārtika ' preface p. 3. The reference is to the view put forward by Windisch, Ueber Das Nyūyūbhūṣya (Leipzig, 1887). Mm. Gaṅgādhara Sūstrī disagrees with this view, citing the definition of a bhūṣya as a work in which '' the meaning of the sūtra is explained in words following (i.e. closely corresponding to) the sūtra, and its own 'i.e. the bhūṣya's) words are then explained ''. Innumerable passages could be cited not only from the bhūṣya of Vūtsyāyana, but also from the work of Prasūstapāda (which is not a bhūṣya in the ordinary sense) and from the Vūrtika of Uddyotakara, in which the writer first gives an aphoristic statement and then proceeds to explain it. It seems to me that this may have been a mānnerism of the earlier philosophical writers. But see zbove, p. 23.

See below, p. 59

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tioned by the grasping of the object through the instruments of knowledge." The purport of this $v\bar{a}kya$ plainly is to argue that knowledge (or the instruments of knowledge) must be accepted to be valid, because if it were not so we could not—as we do—achieve our practical objects. That is to say, it seems to be an early and simple statement of the characteristic Naiyāyika doctrine of paratah prāmānyam, i.e. the doctrine that the validity of knowledge is known from something else' than from the knowledge itself. How do I know that I know? Because my knowledge works in practice². The opposed doctrine is that taught by the Mīmānisaka school,—the doctrine of

²That is, the validity of knowledge is known by a subsequent inference. Tarkabhāṣā p. 94 1. 1 jňanaṁ hi mānasapratyakṣenaiva ýþhyate, prāmāŋyaṁ punar anumānena—the cognition, as such, is apprehended by inner-sense perception: but the validity of the cognition is apprehended by inference. The question as to how the validity of cognitions is grasped is quite distinct from the question how we are aware of our cognitions. The Mīmāmsaka denies inner-sense perception of cognitions, which is the Naiyāyika view stated in the first half of the sentence here cited from the Tarkabhāṣā. It is the other question, that of the way in which we apprehend 'the validity of cognitions, that we are now concerned with.

The Sāṇkhyas held that both validity and, invalidity of cognitions are apprehended from the cognition itself (sratah): the Naiyāyikas held that both are apprehended from something other than the cognition (paratah): the Mīmānisahas held that the validity of a regnition is apprehended from the cognition itself, while its invalidity is apprehended from something else (i.e. from learning of some defect, dosa, whiel invalidates the cognition. Truth needs no criterion: but error does). See SDS, chapter on the Jaimināya-darsana, p. 218-ap. 196 in Courl and Gough: and note 1 p. 52. Cf. also the Nyāyapradāpa commentary to the Tarakabhāsa, p. 88, and Gaṇgāṇāth Jhā's discussion of this topic in the Sadho Lal Lectures on Nyāya (pp. 35—50). Thibant's admirable translation (in Indian Thought vol. II, 1910, pp. 28—39) of the passage in the Slokavārtika which deals with this topic, viz. codanāsūtra verses 21 fl., is illuminating. (The translation was not continued, and remains a mere fragment. But the whole of the Slokavārtika has been translated by Gangānātha Jhā, Bibliotheca Indica, Calcutta, 1908).

¹Strictly speaking, pramā is knowledge, and the instrumental nour, pramāṇa signifies the instrument of knowledge—pramīṇate anena; or, pramāḥaraṇam pramāṇam. Similarly anumāna, as the instrument of inference (anumīṇate anena), is opposed to anumiti, inference as a resultant: and upamāna (upamīṇate anena) to upamiti. But these distinctions, though drawn by Vātsyāṇana himself were not always rigidly observed by him.

svatah prāmānyam or self-evidence: that the validity of knowledge is known 'from itself'.

The motive which led the $M\bar{\imath}m\bar{a}msaka$ school to adopt the doctrine of the self-evidential nature of cognition is plain from Sabara's commentary on $M\bar{\imath}m-\bar{a}ms\bar{a}$ $S\bar{u}tra$ 1. i. 2. It was a device for throwing the onus probandi on those who doubted the validity of

scriptural injunctions.

"That cognition only is false which, after having originated, subsequently lapses (is set aside)—there arising a further cognition 'this is not so'. But the cognition brought about by a Vedic Injunction is not set aside at any time, or in the case of any person, under any conditions or at any place: hence it cannot but be true '' (Thibaut's translation). When the Veda enjoins that a man desirous of heaven should perform sacrifice, how is it possible to disprove that sacrifice leads to heaven? It is not possible! ergo, the injunction leads to a cognition which is valid: since every cognition is valid unless and until it is disproved-and this can never be disproved. Kumārila (or a predecessor) developed this naïve position into a generalised doctrine of the intrinsically self-evidential character of knowledge. "Some maintain that, since cognitions untrue by themselves cannot by any means be proved to be true, the validity as well as the invalidity of cognitions is due to themselves (is intrinsic). Others hold that a cognition becomes valid or invalid from the ascertainment of either the excellences or defects of the cause to which it is due "1. The principal objection urged by Kumārila against the former view is that "without reference to something extraneous it could not be determined which character (validity or nonvalidity) belongs to which particular cognitions ",-so

^{*} Thibaut's translation of verse 34. The some referred to are the Sāmkhyas, the others are the Naiyāyikas, see preceding note.

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that in the end the theory of intrinsic validity-andinvalidity has to be abandoned. He then turns to another view1,—" Let, therefore, non-authoritativeness be considered as the natural character of cognitions, while their authoritativeness depends on something else." The supporter of this view urges that error is the natural thing—as illustrated in the case of dreams: and (invalidity being the mere negation or absence of the positive character, validity) it is methodologically unsound to treat the mere negation, invalidity, as a quality superadded to the cognition, and to assign it to a positive cause, viz., the presence of 'defects' in the cognition, as the Mīmāmsaka does. The truth rather that it is the addition of certain virtues or qualities' (quna)—extrinsic cognition—which to makes the cognitive process (in itself inherently in-The so-called defects (which are supvalid), valid. posed to be the positive cause of error) are no more than the absence of the 'excellencies'. "The general conclusion against the Mīmānisaka then is that Vedic iniunctions cannot be considered authoritative, for if they are not due to men² (possessing such good qualities as trustworthiness and so on), they cannot claim any authority; and, assuming they were due to men. it

¹Thibaut's translation or verse 38. This is the *Bauddha* view, as appears from the couplets cited in *SDS* and referred to in note 1, p. 50. In my text the proper order of the lines is inverted; Cowell's translation implies the following, which must be the right order:—

pramānatvāpramānatve svatah sānishyāh samāsritāh; naiyāyikās te paratah; sangatās caramam svatah; prathamam paratah prāhuh prāmānyam; vedavādinah, pramānatvam svatah prāhuh, paratas cāpramānatām.

[&]quot;The Sānikhuas hold that both validity and invalidity are intrinsic: the Naiyāyikas that both these are extrinsic: the Bauddhas say that the latter is intrinsic, while the former—validity—is extriosic: the followers of the Veda (i.e. the Mīmānsakas) say that validity is intrinsic and invalidity extrinsic.".

²The Mimānisaka tiew is that the Veda has no author, human or divine, but exists from eternity. It is this doctrine that provides the motive for the characteristic Mimānisaka tenet of the eternity of sound (śabda), which was a principal battleground of the early schools. Mimānisaka tenets are often theological dogmas generatised into philosophical theories

would be impossible to show that those men possessed the required perfections (capacitating them to lay down the law on supersensuous matters). Vedic injunctions thus have no ground to stand on ".".

The principal objections urged by Kumārila against this view are, in the first place, that superadded 'qualities' could not lend to cognition the capacity to know truth, unless that capacity were inherent in it; since a faculty which a thing does not possess in its own right cannot be produced by another agency2. And, in the second place, the demand for proof of the validity of cognition leads to a regressus ad infinitum. If you insist on asking 'How do I know that I know?', you will also have to ask 'How do I know that I know that I know?'. 'If even when a cognition has originated its object were not definitely (certainly) known until the purity (excellence) of its cause is cognised through some other means of knowledge, we should have to wait for the origination of another cognition due to another cause . . . And this other cognition again would be authoritative only on the cognition of the purity of its cause, and so ad infinitum. The person proceeding in this way would never reach a final resting lace ''a

^{&#}x27;Thibant's translation of verse 46,—tatas ea puruṣābhāvāt, sati ve 'addhyasambhavāt, nirmūlatvāt pramāṇatvam codanāyām na yujyate.

²na hi svato ' satī šaktiķ kartum anyena šakyate. Verse 47.

[&]quot;Thibaut's translation of verses 49-51. Both arguments carry neight, though they do not prove just what Kumārila seems to have thought bey proved viz. that any individual cognition can claim svatah prāmānna, eff-evidence. What they do indicate is that it is useless, and in fact seningless, to look for a criterion of knowledge outside knowledge: or for a riterion of a particular cognition outside the particular system to which it clongs. As to the regressus ad infinitum, this is a practical difficulty to which the Mīmāmsaka view is as liable as any other. For there is always be doubt as to whether 'defects' are present: and it is not really disposed by saving that knowledge is self-evident; for a self-evidence which only sts until it is displaced by an equally self-evident contradictory cognition, is guarantee of truth.

SECTION 3. NEGATIVE JUDGMENTS

The second and third 'sentences' or $v\bar{a}kyas$ in the $Ny\bar{a}ya-bh\bar{a}sya$ introductory to $Ny\bar{a}ya-s\bar{u}tra$ I. i. 1 are as follows:—

sataś ca sadbhāvo 'sataś cāsadbhāvaḥ "

and

saty upalabhyamāne tadanupalabdheh pradī-

pavat.

That is: "The knowledge of what is as existent, and of what is not as not existing" (constitutes truth). The question arises how, in the latter, case, there can be apprehension through an instrument of knowledge. "As in the case of a lamp, where an existent thing is perceived, from non-perception of that" (i.e. from not perceiving the non-existing thing we apprehend it as not existing). Vātsyāyana says: satah prakāśakam pramāṇam asad api prakāśayati—"the instrument of apprehension that reveals existent things also reveals what is not there. When visible objects are apprehended by means of the lamp that shows them, we argue, 'what is not apprehended like this is not here, for if it had been I should have seen it as I see this. It is not here because I do not apprehend it (vijāānā-bhāvān nāstīti)".

The problem is that of the negative judgment; and the reason why it is raised here is not apparent, seeing that a section is devoted later on to dialectical difficulties in connection with the apprehension of absence or non-existence. Perhaps it was felt that the absence of all reference to non-existence or negation in the enumeration of the sixteen categories in the first sūtra needed some explanation. Vātsyāyana, after the observation that the instrument of apprehension that reveals existent things also reveals the non-existent.

In NS II. ii. 7-12. The topic is dealt with below, p. 328 ff.

goes on: "and it is the existent that will be taught in sixteen divisions ": the implication of which is that in teaching, the existent the sastra will have taught what does not exist,—eo ipso. Uddyotakara¹ says that the word tat, from which tattva 'that-ness' is the abstract noun (meaning 'truth' or 'reality'), includes both the existent and the non-existent. That is, the 'that-ness' of things comprises both the truth as to what they are and the truth as to what they are not. Both what a thing is, and what it is not, are alike objects of knowledge (pramāṇaviṣaya, prameya): and both alike can be asserted or denied. An opponent thereupon suggests that if both the existent and the non-existent are alike objects of knowledge (prameya) it will be impossible to maintain the distinction between existing and not existing. . This is another aspect of the dialectical difficulty about the negative judgmenthow can you know what is not? The point here made by the opponent is that in asserting knowledge you assert the existence of its object: but in the negative judgment the object is asserted as not existing: so that an apparent self-contradiction is involved.

Uddyotakara replies that the inference that two things (existence and non-existence, for instance) are not distinct because they are alike (in respect of both being objects of knowledge, for instance) proves too much. For, by parity of reasoning, a cow would not

be distinct from a pot.

SECTION 4. CONDITIONS OF POSSIBILITY OF ERROR

Vācaspati Miśra devotes a section² to the likeness between the existent and the non-existent (sadasatoh sārūpyam), in connection with the problem of

¹NV p. 10 l. 5 ff.

²NVT p. 53 l. 1 ff., in his comment on the second sūtra: the topic being the nature of error. He is dealing at this point with a false negative existential judgment e.g. the assertion that the soul does not exist.

error. His general position is that false judgments always proceed on the basis of some xerisimilitude, or community of character between the real thing and the false appearance: "we do not mistake a taste for a colour, nor a mosquito for an elephant''. For instance, when the jaundiced eye sees the white conch as yellow, what happens is that (a) we experience the vellow of the bile, mingled with the pollucid visual ray, as it emerges, and we experience it without a substrate; (b) we experience the conch with its whiteness obscured by the defect in the visual organ; and (c) we do not experience the dis-connection of the quality yellow with the conch. Owing to our failure to apprehend this dis-connection, there arises a similarity with the case of residence (of yellow) in such things as the yellow Cirabilva tree; and so we erroneously judge that the conch is yellow. Similarly when we have the experience of a lump of cane-sugar which is brought in contact (with the taste-organ) by the touch-organ, its sweetness is not experienced, and we experience the bitterness of the bile resident in the extremity of the taste-organ, while we do not experience a bitter object as the substrate of this bitterness: through not apprehending the absence of connection between the hitterness and the sugar², there arises a similarity with the residence of bitterness in the Necm tree, etc., and so we form the erroneous

¹P. 52, 1, 15, na hi ātu rūpam rasādiņu hastinam vā mašakādiņv īropaganti

^aThe whole passage is difficult to interpret, and particularly the phrase asambandhāgraheṇa pātacirabileādisāmānādhikaraṇṇeṇa sārūpyāt; and the corresponding phrase sambandhāgrahasārūpyāt tiktanimbasāmānādhikaraṇṇeṇa. [The first instrumental case is the instrumental expressing the means, while the second is the instrumental governed by words expressing resemblance: the meaning being "resemblance to real cases of residence of a quality in a thing,—such resemblance being produced by our failure to see that in the case in question there is not any connection between the property and the thing to which it is attributed ".] In the second phrase it seems necessary to read asambandhāgraha—, in place of the sambandhāgraha of the text.

judgment that this sugar is bitter. But the process is so quick that we are not aware of the succession of phases in it. We do not say that wherever there is resemblance there is error; but that wherever there is error there is necessarily some kind of resemblance. In the same way, in such illusions as those of diplopia, confusion of orientation, and the apparently continuous circle of fife produced by a whirling firebrand,? some kind of similarity has to be supposed. This being our general view of erroneous judgment, the objection is urged that (in the case of the erroneous negative existential judgment, 'the soul does not exist'), since there is not any similarity between the absolutely different notions of being and not being, an erroneous judgment would not be possible in this case. The $V\bar{a}rtika$ meets this objection by pointing out (NV,p.25, 1.13) that being and not being resemble each other in being alike objects of knowledge. Then the objection is urged that, if they are alike, there is no difference between them; and there can be no question of an Tronsous existential judgment. This objection again the Vārtika meets by explaining that the erroneous existential judgment 'the soul does not exist' proceeds by falsely attributing to the soul, which exists; the characteristics which belong to the non-existent, namely, absence of activities and qualities and so on.

The theory of truth and error is developed by the later commentators in connection with the list of heresies.

[–] ¹atisīghratāyā caiṣa kramo na lakṣyate NVT p. 52 1. 24.

²evam dvicandradinmohālātacakrādisv api kathamcid sūrūpyam ūle, nāyam. p. 52, last line. The illusion of the alātacakra has had a notable history in Indian philosophy. The Buddhist uses it to illustrate the illusory character of experience—see Laukāvatāra I. 41, X. 176 and 443. It is borrowed, in this use, by the Gaudapādīyakārikā: see Dasgupta, History of Indian Philosophy, p. 428, and Faddegon, Vaišesika System, p. 65. In the Nyūyasūtra, III. ii. 61, the illustration is used in a different way, to support the contention that cognitions cannot be simultaneous—where they seem simultaneous, it is really a case of rapid succession, producing the illusion of simultaneity—like the whirling firebrand.

Truth

and the parallel list of orthodox doctrines, given by Vātsyāyana in the Bhāṣya on the second sūtra¹: a passage which constitutes a kind of cætechism of orthodoxy, drawn up in deliberate opposition to Bauddha and other heresy. But it is error rather than truth that seems to need an explanation². Accordingly Vācaspati proceeds to classify theories of error³.

The parallel list of orthodox tenets is at p. 8 l. 20 ff. It is introduced by the remark that the true doctrine is already implied as the opposite of the above heresies,—tattvajñānam tu khalu mithyājñānaxiparyayeṇa vyākhyātam.

Vācaspati seems to admit that the first heresy, that of denying a soul, i.e. the Buddhist nairātmyavāda, might claim certain advantages, as a means of putting an end to desire and aversion (rāgūdinivṛttihetur nairātamyadarśanam)—for it is his 'self' (ātma) that a man loves and works for, while he hates and works against any who stand in the way of this 'self'. But, says Vācaspati, the doctrine is the prime source of the heresy (āṛṣṭi) that "there is no 'karma' vor fruit of karma; as also of the belief that there is no such thing as transmigration.

The older school of $ily\bar{a}ya$ was perhaps a little uncertain in its doctrine of truth. It was rather the $M\bar{\imath}m\bar{a}msaka$, with his doctrine of svatahprāmānya, who succeeded best in formulating a self-consistent theory of truth. The $Ny\bar{a}ya$ school adopted the doctrine of paratahprāmānya in opposition, mainly, to the $M\bar{\imath}m\bar{a}msaka$ insistence on the self-evidential character of scriptural authority. But the school did not carry out the doctrine thoroughly in application to all the pramānas. It would in fact be difficult to work out a theory of knowledge on the basis of 'proofs' (pramāna) none of which have self-evident probativeness (svatahprāmānya). It will be seen later on, in treating of the 'pramānas', that the notion of pramāna is subject to ambiguity, sometimes meaning 'proof', but more often 'instrument of apprehension'. It is this ambiguity which finds expression in the doctrine of paratahprāmānya.

³There is parallelism of thought between the fivefold division of theories of error expounded by Vācaspati Miśra, and the discussion whether talse opinion is possible in Plato's *Theortetus* 187 D. ff.

^{**}NBh* p. 7 l. 14 to p. 8, l. 6 gives the list of heresies, e.g. that there is no soul; that what is not the soul (for example, the body) is the soul; that what is really painful is pleasure; that the eternal is non-eternal, that activity does not entail 'karma' and the fruit of karma; that transmigration does not imply a being that is born and lives (jantur jīvo vā) a spirit (sattra, masc.) or soul which dies and after death' is; that transmigration comes about by the breaking up and restoration (ucchedapratisamdhānābhyām,) of a continuum (samtāna) formed of body, organs, 'buddhi', and 'vedanā', and does not pertain to a soul (nirātmaka); and so on.

SECTION 5. THEORIES OF ERROR

Uddyotakara asks—What is error? His answer is that it is the cognition of 'that' in what is not 'that' '(atasmins tad iti jñānam)'. Vācaspati Miśra² adds that the question as to the nature of error is raised because philosophers hold different opinions about it (parīkṣakāṇām vipratipatteḥ samsayaḥ).

- (i) Theory that the object of erroneous judgment is merely subjective or ideal—ātmakhyāti.
- "Some say that error is cognition consisting in a presentation and making externality its object." That is, error consists in projecting under the guise of an external thing what is really only an idea. This is the view of the idealistic school of Buddhism (vijnānavādin), and is known as the ātmakhyāti, or theory that the supposed external object is only the self (i.e. only our own 'ideas').

Vācaspati meets this view by asking what ground there is for saying that 'silver', in the erroneous judgment 'This is silver', is only an idea. The experience itself 'this is silver' declares 'silver' to

¹NV p. 26 l. 4. kah punar ayam viparyayah? ep. PBh. p. 199, l. 13.

²NVT p. 53 last line, ff. See Keith ILA, p. 48 ff, and Ganganatha Jha's Sadho Lat Lectures, chapter III, p. 51 ff.

^{*}svākāram bāhyatvaviṣayam jūūnam viparyayah. The thought is awkward!y phrased here: much more clearly below, p. 54 I. 3, svākāram bāhyatayā 'lambante vibhramāh,—'illusions are grounded in a presentation under the guise of externality ''. Ideas 'in the mind ' are mistaken for things ' without the mind '. As regards the rendering ' presentation ' for svākāra (i.e. jūāṇākāra), literally 'knowledge-form ': some such rendering as ' presentation', or 'content of cognition', seems inevitable. The thought underlying the term ākāra is that thought itself assumes certain shapes or forms. Some hold that these shapes correspond to external reals (realists), others that they constitute the objects (idealists): others again deny that thought has any 'shapes' (nirākāra. Cf. the pasage in Sāburabhāsna translated below, chapter II section 5, p. 144). These three views we should express by saying that presentations or ideas correspond to objects; that presentations or ideas are objects; and that there are no ideas or presentations (Locke; Berkeley or Hume; and Reid).

belong to the non-ego (anahankārāspada), and does not declare it to be 'within the mind',—for if it did the experience would take the form 'I am silver' (anahamkārāspadam rajatam ādarsayati, na cāntaram, aham iti tadā syāt),—seeing that the Bauddha idealist identifies the self with ideas (pratipattuh pratyayād aryatirekāt). Perhaps the Bauddha will say that the apparent reference to a non-ego is illusory: knowledge is mistaken (bhrāntam jñānam), and is grounded in a mere idea projected as an external thing (svākāram eva bahyatayā 'lambate): it is thus that its object, really only a content of consciousness, is referred to a non-ego (tathā cānahankārāspadam asya visayo jñānākāro 'pi). (Thus the experience itself," This is silver', conceals the fact that 'silver' is only an idea. But—) we can learn from the sublating cognition (bādhakajñāna—' it is not after all silver') that ' silver' was only an idea (jñānākāratā punar asya bādhakajñānapravedanīyā). To this Vācaspati replies that if the Bauddha would put aside his idealistic presuppositions (vaijnānikapaksapātam parityajya) he would see that what the sublating cognition denies is that 'silver' is the form of the object before us (purovartidravyākāratāmātram pratisedhati rajatasya): and it does not suggest further that 'silver' is only an idea (jñānākāratūm apy asyonadarśayati). Perhaps it will be said that the merely ideal character of 'silver' is established by implication as a result of denying that 'silver' is actually present (purovarttitra), although the non-denial of the actual presence of the silver which we have seen in shops and elsewhere cannot be used to prove its ideal character... The answer to this is: whence comes this notion

¹Reading, ex conj., asyā atannisedhah for the textual asyātannisedhah. asyāh in this conjectural reading, will stand for jnānākāratāyāḥ. The meaning simply is that though the ideal character of the object does not emerge when experience does not contradict our jndgments, it comes out clearly enough in a false judgment, subsequently contradicted by experience.

of silver as existing 'within the mind', seeing that (by your own confession) it has not been previously so experienced'?

- (ii) Theory that the non-existent is the object of reroneous judgment—asatkhyāti
- "Others hold that (error is) cognition (which) has the non-existent for its object". The passage in

'antaratram anupalabdhacaram kutastyam, i.e. the Bauddha idealist admits that in the primary experience silver presents itself bāhyatraā—as something 'without the mind'. There has then been no experience of rilver as only an idea. Flow then are we to infer, from the contradictory experience, an internality or ideality of 'silver' such as we have never experienced?

In the commencement of this argument Vācaspati has said (p. 51-1.4) that the ideality of 'silver' etc. is established either from the experience itself or as the result of inference (pāānākāratvam rajatāder anubhavād vaātasthyāpyate anumānād vā. The text has anubhāvād). Having first shown that ideality is not given in the experience itself, in the present sentence he disposes of the suggestion that it' may be inference. The nature of the inference is indicated by the phrase used in the previous sentence—arthāj jūānākāratāsiddhih—' the ideality of 'silver' is established from implication'; that is, the process is that which the Ālīmāinsakas call arthāpatti; you are forced to suppose that 'silver' is ideal, in the case of an erroneous indigment, because there is no other way of explaining the facts. But neither the Naiyāyika nor his Bauddha opponent admit that arthāpatti is a separate instrument of truth; both alike reduce it to syllogistic inference, anumāna. And, regarded thus as a syllogism, the 'inference' that 'silver' is only an idea is certainly open to the objection which Vācaspati brings against it; the conclusion introduces a major term (ideality) the connection of which with the middle, (contradiction of actual presence of 'silver' etc.) has never been experienced in parallel experiences (sapaksa). Vācaspati is thus justified, from his own and his opponent's standpoint, in adding: na cānumānam atra prabhavati (p. 54 l. 15) ''inference is of no avai' here".

The question remains whether all inference really can be reduced to syllogism. The question which Väcaspati asks—whence do we get the notion that false objects are 'only ideas'?—is a very pertinent question. But, somehow or other, we do get this notion. It may be a wrong notion. But it is a very convenient way of disposing of 'false objects', to relegate them to the limbo of mere ideality. And, in the absence of any other explanation of error, the implication or presumption (arthāpatti) that 'silver' (erroneously predicated of what is really nacre) is 'only an idea', will be the hypothesis which holds the field. If however, with the mīmāmsaka, we can maintain that there are no 'false objects', we shall be able to dispense with any necessity for 'ideas'.

²NVT p. 54 l. 1—anye 'sadvisayam jūānam, see Keith ILA p. 49 'the nibilist doctrine of the Mādhyamikas, according to which all apprehension is of the non-existent (asatkhyāti), and is itself non-existence '. As a matter of fact the Mādhyamika refused to make so definite an assertion as that of the non-existence of all things. His favourite formula is that of

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which Vācaspati Miśra states this theory is as follows'. 'Let us then follow the lead of the sublating judgment (i.e. the judgment 'after all this is not silver'), and say that erroneous apprehension has the characteristic of manifesting the non-existent. For the sublating judgment grasps the non-existence of the object of the thought 'silver' (rajatajñānagocarasyāsattvam grhṇāti). Nor is there any difficulty in a non-existent's being the object of cognition: for to be an object of cognition does not involve being a cause of cognition,—if it did, of course the non-existent could not be an object (since it cannot be a cause, of cognition or of anything else). But there is in knowledge a certain overflow or excess of efficacy, dependent on no other causes (svakāraṇādhīnaḥ sāmarthyātiśayaḥ), of such a nature that in virtue of, it

Nāgārjuma's Mādiyamikasūtra 1. 7 nasan nāsan na sadasan dharmo nirvartate. He tries to keep an equipoise between four alternatives (catuskoti)—
'is', 'is not', 'both is and is not', 'neither is nor is not'. See SDS, p. 23
(=p. 23 in Cowell and Gough's transl.) atas tattvam sadasadubhayānubhayā tmakacatuskotivinirmuktam sānyam eva. Cf. Poussin in Muséen, n. s. vôl. ii. p. 174 note 59. Gough translates: "The ukimate principle, then, is a void emancipated from four alternatives, viz., from reality, from unreality, from both (reality and unreality), and from neither (reality nor uquellity)". The application of the medius tutissimus principle in their d'alectic is perhaps a more likely explanation of the name Mādhyamika than that offered by the SDS, and rejected by Poussin loc. cit. p. 177 note 68.

We are here concerned with asatkhyāti as a theory of error primarily. But it is clear from the SDS that the Bauddha nihilist, like the Bauddha idealist, did not—and could not—distinguish his theory of error from his theory of truth. The argument put figurard in this passage of the SDS to support the formula surram sānyam—all is void—is in fact, (like the idealist's argument) an argument from the nature of erroneous judgments. It is a piece of dialectic based on the analysis of negation of complexes (višistanisedha). The judgment 'this is silver' (in the case where nacre is actually present) is admittedly false. But to say that it is false is to negate the complet consisting of this ness (idantā, 'hocceity', in Gough) and silver-ness. But in the case of a višistanisedha, negation of a complex, it is impossible to deny part without denying the whole (the complex AB no longer exists, as such, if B is denied)—'A semi-effete existence is not admissible. No one imagines that one half of a fowl may be set aside for cooking and the other half for laying eggs' (Gough). The 'this' does not survive the denial of the 'silver'—because it is essentially a 'this' related to 'silver'.

The purport seems to be that a single false judgment is enough to knock the bottom out of the universe: because error tears asunder what can only take on the guise of reality as a complex. But error exists. Ergo, nothing is

¹NVT, p. 54, l. 16 ff.

knowledge can make the non-existent, as well as the existent, its object (yena santam ivāsantam api gocarayati). Efficacy of the object is not required, since we can explain objectivity' from the bare efficacy of the cognition (na ca viṣayaṣāmarthyam upayujyate, jñānasya sāmarthyamātrād eva tadbhāvasiddheḥ). For just this reason (i.e. because objectivity is possible without an 'object' in the sense of a cause of the cognition), one school have asserted this very efficacy of manifesting non-existence, which belongs to erroneous cognition, to constitute the 'nescience'-nature (acidyātva) or 'inexpressibility' (ānirvacanīyātva) of cognition'.

Vācaspati now proceeds to criticise the asatkhyāti, the theory that error has the non-existent for its object, from the standpoint of the $Ny\bar{a}ya$.

"What is meant by saying that the object of error is the non-existent? Is it meant that the erroneous judgment grasps the non-existent as existent (asat sadātmanā gṛḥṇātī, i.e. grasps non-existent silver as ex-

 $^{^{1}}tadbh\bar{a}va=vi$ $\dot{a}yat\bar{a}$: 'its being so', i.e. its being an object, vi $\dot{a}ya$.

^{*} This is the Vedāntin theory: avidyā and anirvacanīya being technical terms in that system. For a parallel to these concepts, see Plato, Resp V 477 A ff. Avidyā corresponds to opinion', δόξα: and its object, the anirvaca iya, corresponds to Plato's 'opinable', δοξαστόν. The object of avidyā is neither expressible as existent nor as non-existent: you cannot say that it is, nor can you say that it is not: and so it is anirvacanīya. Similarly Plato says: οὐκ ἄσα ὄν ουδὲ μὴ ôν δοξάζει,—" one cannot conceive of them as either being or not being, as both being and not being, or as neither." [This is exactly the Mādhyamika's caṭuṣkoṭī]. The object of 'opinion' is τὸ ἀμφοτέσων μετέχον, τοῦ εἶνάι τε κὰι μὴ εἶναι,—-between being and not being. It is therefore compared τῷ τῶν παιδων ἀινίγματι, to the children's riddle.

[•] That there is kinship between the Mādhyamika school of Buddhism and the advaitavādin or absolutist school of Vedānta has often been remarked. Vijnānabhiksu in the Sāmkhyapravacanabhāsya (16th century) calls the latter prācehanna-bauddha, 'Buddhists in disguise'.

NVT p. 54, l. 22 atredam alocaniyam, etc.

isting); or is it meant that it is the existent that is grasped as another existent (sad eva sadantarātmanā arhnāti, i.e. existent nacre is grasped as silver), and that the object is called 'non-existent' because the existent thing (nacre) does not exist as something else (silver)? The former alternative must be rejected, because the man who wants silver does as a matter of fact direct his activities on the nacre, and not on 'non-silver',—and he could not do this if his erroneous notion had as its object 'what is non-existent as silver', instead of having the existent nacre as its object. Besides, how is it that we point with the finger at this actually present substance and say (when the sublating cognition has arisen) 'this is not silver', unless it was to this (tatra) that the nature of silver had been wrongly assigned through the previous judgment? Then it must be the nacre, under the form of silver—in which form the nacre does not exist—that is the object of the erroneous cognition: and the cognition is said 'to have the non-existent for its object' only in this sense that the (existent) nacre does not exist as silver². With this our own view is in agreement: for of course the Naiyāyikas who hold the anyathākhyāti view of error (i.e. that the object of error is the existent appearing as other than what it is), do not hold that one existent thing exists as another existent (sadantarātmanā sad abhyupagacchanti). Such an admission would destroy the whole theory that the existent is cognised 'otherwise' than as it exists (anydthety eva na syāt). The upholders of the anyathākhyāti view have themselves said³: "what is apprehended otherwise (than as it

isataš ca sadantarātmanā išattvād asadvisayam negate. This alternative of course amounts to the Naiyāyika pr anyathākhyāti theory, as Vācaspati proceeds to point out.

²atha kuktir eva rajatātmanā 'satīti tadūkāratayā tēm ālambamānam mithyājāānam asadālambanam ucyate, p. 55, first line.

³yathāhuh anyathākhyātivādinah: tasmād yad anyathā pratipādyeta tān nirālambanam jūānam asadālambanam ca tad. The citation is noted by the editor, Gangādhara Sāstrī, in the list of unidentified quotations given in his preface. The quotation looks like a statement of the asatkhyāti view.

- is), is cognition without objective ground, cognition with non-existence for its object '. At this point' Vācaspati commences criticism of the *Vedāntin* view of anirvacanīyakhyāti, viz., that the object of erroneous cognition neither is nor is not.
 - (iii) Criticism of the theory that the object of verroneous cognition is 'inexpressible', whether as existent or as non-existent.

 Anirvacanīyakhyāti.

Vācaspati's criticism of this theory is as follows:—

"Nor can it be said that no account can be given (anirvacanīyatva) of the actually present substance in its character as 'silver',-seeing that at the time of the erroneous judgment it is designable (nirvacanīyatvāt) as existent, and at the time of the sublating judgment it is designable as non-existent. (i.e.)—It is not true that nothing can be said (prathā nopapadyate) of a non-existent of this kind: since the terms 'existent' and 'non-existent ' are applicable to it (sadasadbhyām upākhyeyat-And as for the 'phenomenal existence' (prapañca) of the absolutist (advaitavādinām), and the Bauddha's view that the universal and so on is nothing external, but a mere non-entity, and as to the doctrine that erroneous cognition is cognition which has this phenomenal existence for its object³,—such, a view is impossible: because that to which no term is applicable (sarvopākhyarahitasya) can be like nothing whatever, and

but no doubt it must be read with the qualifications suggested in this passage, i.e. the object is non-existent only in the sense of not being what it is cognised as be

³NVT p. 5k 1. 5-na ca rajatātmanā, etc.

²See note 2 p. 63.

³This is 10 longer a theory of erroneous judgments about phenomena as contrast d with correct knowledge about phenomena; but a theory that all knowledge of phenomena is, as such, illusion. The Naiyāyika's reply to it is that the very notion if error presupposes a criterion (which he calls 'likeness' i.e. the semblance of truth). If all knowledge is illusion, there is no truth of which error can be the 'semblance': and so there can be no error.

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error (as has been previously argued) has as the condition of its possibility likeness to something: and in the absence of the condition which makes a thing possible it is easy to see that the thing itself (i.e. error) cannot exist. Therefore the world of phenomena (which the Vedāntin regard; a: illusory) and the universal and other categories (which the Bauddha rejects as unreal) are in fact both real existences—they are not false (asamīcīna), and objects of 'nescience'... and therefore also the theory that the object of error is 'inexpressible' is not the true account.'

At this point NVT, p. 55, 1. 13) Vācaspati gives an account of the criticisms brought against the Naiyāyika's theory of anyathākhyāti,—that is, the theory that the object of error is an existent cognised 'otherwise' than as it is. This criticism is used to introduce the Mīmāinsaka theory of akhyāti; and it may therefore be supposed to be a criticism of the Naiyāyika from the Mīmāinsaka standpoint primarily.

(iv) The Mīmāmsaka theory of akhyāti,—error as non-apprehension

A. Criticism of the *Naiyāyika* view.

"It may be (that the Vcdāntin's theory of the inexpressibility of the object of error is open to the objections urged by the Naiyāyika above. But the Naiyāyika wiew is no less objectionable, for the following reasons). That the object appears otherwise than as it is, contradicts our consciousness (samvidviruddha)¹. And error certainly cannot have for its objects things simply as existent (sadbhāramātrenālambanatvam). If simple existence (tanmātra, i.e. sadbhāvamātra) were the

¹Cf. NK p. 180 1. 13 idam rajatam iti jūānāsya šuktikālambanam iti hi samvidviruddham. yasyām hi samvidi yo 'rtho 'vabhāsate sa tasyā ālambanam. rajatajūāne eæ rajatam pratibhāti, na šuktikā. That is: to say that nacre is the ground or object of a cognition which has silver for its object contradicts consciousness. The cbject that appears in consciousness is the object of that consciousness. And it is silver, not nacre, that appears in the cognition of silver.

common object of all cognitions, then all things would be objects of every thought, and the result would be that each cognition would cognise everything (sarvasarvaiñatvāpatti). Nor can it be said that what the cognition has as its object is the existent in so far as it is the cause of the particular cognition (kāraņatvenālambanatvam). For the eye also, no less than the colour, is a cause of the cognition,—so that it would follow that the cognition (of colour) has the eye as its object1. And cognition could not have past and future things for its objects (-as it has-), seeing that past and future things, as no longer or not yet existing, could not be causes of present cognitions. Therefore the ground or object of cognition is the phenomenon, the thing as it appears (tasmāt pratibhāsamānam ālambanam). And, this being so, you would have to say that the presentation of silver has nacre for its object (rajatapratibhāsah śuktikālambanam iti)—a position which it will be difficult to maintain!

Besides, the competency or efficacy (sāmarthya) of the eye and other sense-organs is for the production of right cognition: how should false cognitions through them²? Syāmaka-seed, however it be treated, will not produce rice-plants. You may suggest that the eyes and the other sense-organs may give rise to erroneous cognitions when accompanied by defects (dosasahāua). But this will not do. For defects impede the competency of causes, but they do not impose the competency of producing a different effect. Kuţajagrain, when parched, will not produce a banyan: it will merely fail to produce a kutaja. Besides, if the

The sense-organs are pramūņas, i.e. pramūkaraņa, instruments of knowledge. How can they be instruments of error?

¹rūpādivijūānam rūpādivac cakṣurādy api kāranam iti cakşurādyālambanatvaprasangāt. The objection appears to be well taken. For it would drive the defendant to state his theory in the more precise formthe object is that part of the cause of the cognition which forms the object of the cognition',—and, when so stated, the circle involved in the definition is apparent. You define the object as cause,—but you also define the cause by the object.

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senses ever err in respect of their own objects, the result will be that we shall lose faith in them everywhere."

At this point commences the account of the $M\bar{\imath}m\bar{a}nsaka$ theory of $akhy\bar{a}ti$, i.e. the theory that error is inadvertence, a negative thing consisting in a failure to note.

B. Statement of the Mīmāmsaka view.

"Therefore all cognition must be held to be correct cognition (sarvam eva vijnānam samīcīnam). The meaning of this is as follows:—In the judgment 'this is silver' there are two cognitions, 'this' and 'silver', the former a primary experience (anubhava)² and the latter a memory. The 'this' is apprehension of barely an actually present substance (purovarttidravyamātragrahaṇa): because, as the result of a defect (doṣavaśāt) or impediment to apprehension, there is a failure to apprehend the specific universal (sāmānyaviśeṣa)³ 'being nacre', which is resident in it (tadyataśuktikātva).

And, since this much only is apprehended, it generates through resemblance, by serial rousing of the 'mental impressions' (samskārodbodhakrameņa), a memory of silver. And this memory, although essentially an apprehension of the previously apprehended (gṛhātagrahaṇa = a secondary experience), presents itself simply as apprehension (grahaṇamātra, as opposed to gṛhātagrahaṇa, = a primary experience); because the aspect of

¹NVT p. 55 l. 26.

²Dr. Gangānātha Thā notices the difficulty of rendering anubhava,—a term which covers all experience other than memory. As it is contrasted with memory on the ground of the secondary character of the latter as the recall of a previous experience, 'primary experience 'may serve as a rendering for anubhava. Dr. Jhā translates 'direct apprehension',—with the warning that 'direct' here does not mean immediacy.

³sāmānyavišesa is used here, as frequently, to distinguish the subordinate universal ('being something specific' e.g. 'being substance', 'being earth' etc.) from the summum genus 'being' (sattāsāmānya, or simply sāmānya). There was a certain amount of confusion in the usage of the term sāmānya—see Ui's Vaišesika Philosophy, pp. 35—37, 67, 70, 175, 180.

referring to the previously apprehended (gṛhītatāmśa) has been filched* from the experience, in consequence of some 'defect' (which prevents us from noticing that it is really a memory, and not a primary experience, of 'silver'). And so, as a result of not apprehending the difference (bhedāgrahana) in respect of nature and of object between the memory of silver and the primary apprehension of the actually present thing, the two cognitions,—'silver' (remembered) and 'this' (perceived),—although separate cognitions, nevertheless, through resemblance to the case of cognition which has as its object silver in actual contact with sense, set going the judgment of identity¹ and the reference to a common locus² which is expressed in the proposition 'this is 'silver'.

Sometimes, again, it is two primary experiences of which the separateness is not grasped. Thus when the conch is perceived as yellow, what happens is that the yellowness of the bile-substance residing in the emergent eye-beam is grasped (just as colour may be apprehended in a transparent crystal) while the bile itself is not grasped: and the conch also, owing to a defect in the perception, is perceived barely as such (svarūpamātrena) without its qualities. Thus, as the result of failure to notice the absence of connection between this subject (the conch—which is really white) and this attribute (the yellowness—which really belongs to the bile), and because

^{*}Cp. NK p. 180 l. 16 tadityamsapramosam rajatasmaranam.

¹ abhedavyavahāra.

²sāmānādhikaranyaryapaācša. When an adjective qualifies a substantive, it is said to be a case of sāmānādhikaranya. So Pāṇini calls a karmadhāraya compound a samānādhikaraṇa-tatpuruṣa, I. ii. 42. In a compound such as nilotpala, a blue lotus, both 'blue' and 'lotus' refer to the same adhikaraṇa or substrate: whereas in the ordinary tatpuruṣa compound such as rājapuruṣa king's man (official), 'king' and 'man' refer to different substrates.

^{*}bahirnirgacchannayanarasmivartinah pittadravyasya kācasyevātisvacchasya pītatvam ca grhyate pittam tu na grhyate. The idea is that us colour (of some adjacent object) is seen in a crystal, so is the yellow biles ff seen in the eye-beam.

of a resemblance constituted by its being indistinguishable from the cognition of the yellow cirabilva tree, a judgment of identity and an assertion of community of locus takes place (i.e. we say that 'the conch is yellow'). And, as a result of the disappearance of the judgment of identity—the judgment which followed on failure to apprehend the separateness of the two cognitions 'conch' and 'yellow',—that judgment can be sublated by a discriminating cognition (vivekapratyaya) in the form 'this is not silver': and, this being possible, a place is found for the commonly accepted notion of the erroneousness of (some) cognitions. Thus we arrive at the position which may be stated syllogistically in the form: 'Even erroneous cognitions are true to reality (yathārtha), because they are cognitions,—like the cognition of a piece of cloth' ''.

C. Naiyāyika criticism of the akhyāti theory

Having stated the *Mīmāmsaka* theory, Vācaspati now² proceeds to the criticism of it.

"On the position thus taken up the following observations may be made. Every one agrees that the man who wants silver acts on the actually present object when the erroneous cognition of silver arises, and that he refers the 'this' and the 'silver' to a common locus. The question is whether he does this as a result of not apprehending the difference between the primary experience and the memory, and between their respective objects ('this' and 'silver'): or as a result of apprehending non-difference' between them.

As to this,—an intelligent being does not act on absence of knowledge, 'non-apprehension'; but on

 $^{^1{\}rm V\bar{a}}{\rm caspati}$ brushes this inference aside as 'sublated' by perception $b\bar{a}dhita,$ p. 56, below.

²NVT p. 56 l. 13 evam prāpte abhidhīyate, etc.

The two alternatives are bhedagraha and abhedagraha.

knowledge. You may reply that what sets the man, who wants silver, to act on the actually present substance is knowledge or apprehension-apprehension, to wit, of the actually present thing; the distinction of this apprehension from the cognition of silver in respect of nature and object not having been apprehended. But what do you mean by this? Is this 'apprehension of the actually present thing 'an apprehension of silver? or is it apprehension barely of an actually present object as such? If it is apprehension of silver, then the man has apprehended the actually present object as silver,—and how is this not 'apprehending a thing otherwise than as it is '? (i.e. your view becomes identical with the Naiyāyika view). If on the other hand it is apprehension of the actually present thing that sets a man to act, then why should it need the assistance of a 'non-apprehension of separateness' (ko bhcdāgrahasyopayogaḥ)? You may answer "The sight of a tree simply as such does not set acting the man who wants a śiniśapā-tree, because in that case there is no cognition of a śińsśapā: but in this case there • is cognition of silver—the separateness of which is not apprehended—through the cognition 'this' ''. But unless the silver is cognised in the actually present substance, or the actually present thing is cognised in the silver³, the person who wants silver does not act there, that is, on the actually present thing. He might act anywhere whatever, instead of acting on this: for it is not then through this (the actually present thing) that silver is cognised. But, you will say, it is the two separate cognitions, 'this' and 'silver,', taking on the

¹The text has purovartivastugrahaņarajātājāānād agritītabhedam. But it is necessary to read purovartivastugrahaņam, etc.

²asti tr iha rajatavijāānam agrhītabhedam idam iti jūānena. The precise relation of the thought 'this 'to the thought 'silver' is not indicated by this ambiguous phrase, which merely asserts tilat the former thought is somehow instrumental to the latter. In the following sentence Vācaspati tries to force the opponent to a more precise formulation of this 'instrumental-ity.'

nanu rajatavijāānam purovartidravye na vartate purovartijāānam ca na rajata iti.

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semblance of the single cognition 'this is silver' because their separateness is not apprehended, that set the appropriate activity to work. If so, why do not the two cognitions also initiate a process of thought which would reveal their separateness—'this is silver'. 'that is nacre '? For if as a result of non-apprehension of separateness there arises likeness to the apprehension of non-separateness, then equally as the result of non-apprehension of non-separateness there will arise likeness to the apprehension of separate things. (That is to say, simple failure of apprehension includes non-apprehension of unity of 'this 'and 'silver', as well as non-apprehension of difference of 'this' and 'silver': and if non-apprehension of difference amounts to a cognition of unity, 'this is silver', then non-apprehension of differ-' ence will amount to a cognition of difference, is not silver—that is silver, but this is nacre'). And so the knowing subject has been placed in a very unfortunate position by these acute thinkers with their ultra-minute analysis² for he is drawn both ways at once—in the direction of action and in the direction of . refraining from action—owing to the semblance both of apprehension of difference and of apprehension of identity (between 'this' and 'silver', i.e. he will have simultaneously the notion that it is silver, and the notion that it is not silver)

Be it so (retorts the *Mīmāmsaka*). But you will have to assign a function to the subject's 'non-apprehension of difference' even in the origination of your so-called *viparyayajñāna* or 'erroneous cognition': otherwise

¹yady evam, tad rajatam iyam suktir iti bhedāvabhāsivijnānavyava hāram api kasmān na pravartayatah? yathaila hi bhedāgrahād¹abhedajñāna sādršyam, evam abhedāgrahād bhinnavijñānasādṛšyam api.

The argumentum ad hominem is justifiable, because the Mīmāmsaka is appealing to a mere negative in his akhyāti. Mere non-apprehension can do nothing—or if it does anything there is nothing to prevent it from doing everything. Failure to notice will be as much non-apprehension of the one alternative as it is of the other.

**Pratipattā kastām dašām āvešitah prajūāšalibhir ativyākhyayā.

it would come about that erroneous cognition might arise in the case of persons who had apprehended the difference (which is absurd). And so it can be said in your case too 'why should not true cognition arise from the other aspect of the non-apprehension, viz., from non-apprehension of sameness between this and silver, just exactly as erroneous cognition results from the one aspect of the non-apprehension, viz., from non-apprehension of difference between this and silver?' So that the argument which you use to confute our account of the process' will serve us to confute yours.

As the upholders of the theory of error as non-apprehension (akhyātivādinaḥ) have said: 'For those also who hold the theory of error as contrary cognition (vipa-ħtakhyāti=anyathākhyāti) error is dependent on the influence of non-apprehension'.'

Not so (answers the Naiyāyika). We have experience, in the case of the eyes and other sense-organs, of causes of cognition the relation of which to their effects (colour, in the case of sight) is not apprehended: but we cannot conceive of conscious judgments which are not conditioned by apprehension³. Now where thought is a condition precedent of a cognition, there is no room for your 'non-apprehension of difference'. This seems to us the correct view. If the fact that we also fail to apprehend the absence of difference is an impediment to the judgment ('this is silver'—a judgment based, as you

[^]tatra yas tava parihāras so 'smākam vyavahāvavyapadesayor bhavisyati.

²Noted by the editor as an unidentified auotation.

 ^{*}maivam, jñanahetūnām ajnātarūpakāryasambandhānām cakṣurādīnām darsanāc, cetanavyavahārānām tv abuddhipūrvakānām apratīteḥ.

Vācaspāti teaches that there are two kinds of cognition—cognition which comes from previous cognition, and cognition which does not. Sense-perception belongs to the latter category. Now in the case of conscious judgment, i.e. judgments formed by a conscious process, it is not possible to treat non-apprehension of differences 'as a cause of the resultant cognition: for being conditioned by precedent cognitions the conscious judgment cannot be regarded as conditioned by a precedent 'non-apprehension'.

Mimāmsakas suppose, on failure to apprehend the difference between 'this' and 'silver'),—then whence comes a judgment which is as a matter of fact confined to one of the two alternatives (i.e. which categorically asserts that 'this is silver', or that 'this is not silver')? The conclusion then is that the so-called 'non-apprehension of difference' is simply the illusory attribution of a predicate to a subject (samāropa eva bhedāgraha iti siddham).

- (v) Formal statement of the Naiyāyika's anyathākhyāti theory of error, and reply to certain criticisms.
- "The outcome of the discussion is this. The cognition of 'silver' and so forth has the actually present thing for its object; because it determines the man who wants silver to act on just this thing (tatra niyamena pravartakatvāt); and any cognition which determines the knower's activity to any particular thing has that thing as its object,—as in the example (accepted as such by, both parties to the discussion) of a true cognition of silver; and this (erroneous cognition of silver) does so (i.e. directs activity on the actually present substance); therefore it is so (tasmāt tathā, i.e. it has the actually present nacre as its object).

As to the criticism² that the nacre as such is not sensibly present and therefore cannot be the object of the erroneous cognition of 'silver' (anavabhāsamānā suktikā nālambanam iti),—do you mean that being nacre

²See (iv) A above, where the criticisms here met are stated. The particular criticism meant here is stated there in the form rajatapratibhāsaḥ subtibālambanars. See p. 67

suktikālambanam. See p. 67.

[&]quot;This is a statement of the siddhānta, or established Naiyāyika doctrine, in the form of a syllogism or paūcārayavavākya. The only difficulty about the statement is the insertion at this point of the words na tathā caitat (I have omitted the words in translating). This is the formula for the upanaya or fourth member of syllogism when the syllogism is stated in negative form i.e. as an argument from a vipakya or negative example. No negative example has been given, and so the negative formula for the uranaya comes in awkwardly; but all that it is meant to indicate is that the argument is of the avayavyativekin type, and so would admit of a negative form also.

(śuktikātva) is not the object of the cognition of 'silver'? If you mean this you are only proving something which is already admitted (siddhasādhana). Or do you mean that the actually present shining white substance as such is not the object of the cognition? If you mean this, it is not true that this is not sensibly present¹: for we point with the finger at the actually present thing, the 'this'. Another objection which was made depended on the assertion that 'defects impede the competency of causes, but they do not impose the competency of producing a different effect.2 'But experience shows cases of the production, by causes which have been impaired, of new effects, through counter-action of the natural effects. For instance, the seed of canes burnt in a forest-fire produce banana shoots: and the digestive powers impaired or affected by 'bhasmaka' or morbid appetite can deal with increased quantities of food and drink³.

And the inference to the effect that 'erroneous cognitions are true to reality, because they are cognitions,4 ought not to be put at all, seeing that it is invalidated • (apahrtavisaya, i.e. bādhita) by a sublating cognition based on perception, viz., in the judgment 'this is not silver' (which proves the original cognition of silver not to have been true to reality).

The text has (p. 57 l. 21) uttarasminnavabhāsamānatvam asiddham. But the sense clearly requires anavabhāsamānatvam: and I have read this.

²P. 67 above. ³The first example is taken from unnatural history, and the second is hardly an example of a 'different' effect—although the 'defect'

increases instead of impairing the competency of the cause.

*See above, p. 70. A syllogism of which the 'Proposition' is counter to perception or authority is already debarred from being a valid inference, and need not be further examined. It is obviously easy to misuse this notion of 'bādha': and the substitution of pancarūpopapannatva (by the addition of badha and satpratipaksa, sublation and neutralisation) for the trairupya (the three canons) as a criterion of argument seems unfortunate trairāpya (the three canons) ās a criterion of argument seems unfortunate (though, so far as $b\bar{u}dha$ is concerned, it has the authority of the older commentators on $Ny\bar{a}ya$, viz., Vātsyāyana and Uddyotakara, and appears in Prasastapāda under the guise of $pratij\bar{n}bh\bar{u}sa$ —also, inconsistently, in Buddhist logic under the same guise). In the present instance the appeal to 'sublation' appears to beg the question: for the $M\bar{u}m\bar{u}saka$'s whole point is that the judgment 'this is not silver' does not affect the truth to reality of the original 'this' and 'silver'. 76 Truth

And (finally), in spite of the fact that the semblances of proof go astray, we still place reliance on proof itself. This is what is indicated in the 'sentence' embodied in the $Bh\bar{a}sya^2$ which states that practical achievement of objects depends 'on the grasping of the object as the result of (and through)³ proofs or instruments of valid cognition.'

¹pramāṇābhāsa means fallacious proof, as hetvābhāsa means the special kind of fallacious proof consisting in a fallacious reason. It has been noted above that ⁴ proof ' is not a correct rendering of pramāṇa: but the paraphrase ' instrument of valid cognition ' is (though more accurate) too inconvenient.

²The first of the three $v\bar{a}kyas$ embodied in the $Bb\bar{a}sya$ on NS I, i i, i. See p. 49 above.

^{**}pramāṇataḥ. The termination is properly ablatival. But, as Uddyotakara points out, the force of the instrumental case also is implied here.

The criticism last answered is that last put by the $Mim\bar{a}msaka$, p. 68, above.

This concludes the discussion of the theories of error, which extends from p. 53, last line, to page 57, last line, in the $T\bar{a}tparyat\bar{i}k\bar{a}$. I have translated the passage in extenso, because it serves as a locus classicus for the topic, and because (so far as I am aware) the $T\bar{a}tpar^iyat\bar{i}k\bar{a}$ has never been translated.

CHAPTER II

PERCEPTION

Indriyārthasaħnikarṣotpannain jñānam avyapadeśyam avyabhicāri vyavasāyātmakain pratyakṣam

Is the object in perception real?—Can perception be erroneous? (first part of the vittikāra's argument, and the epithet avyabhicāri in the Nyāya-sūtra definition).—The argument from dreams against the reality of perceptual objects (second part of the vittikāra's argument).—The dialectic of whole and part (Nyāyasūtra IV. ii. 4—37) Does the object dissolve under analysis?—Is thought distinguishable from the object of thought? (third part of the vittikāra's argument, and the epithet avyapadesya in the Nyāyasūtra definition).—Can perception be doubtful? (the epithet vyavasāyātmaka in the Nyāyasūtra definition).—The nature of the 'contact' in perception (indriyārthasanīnikarşa of the Nyāyasūtra definition).—The two moments of perception, and the modes of contact. (Prašastapāda's doctrine).—'Simple apprehension' and the perceptual judgment—nirvikalpakajūāna. (Sridhara's polemic against Dinnāga's account of perception). Kṣaṇabhaṅgavāda.—The universal as real.—Recollection Attention and Association.

SECTION 1. REALITY OF THE OBJECT IN PERCEPTION

Perception is the one instrument of knowledge admitted by all schools alike¹. The obvious conception of a contact between sense-organ and object (indriyārthasamnikarṣa) was the starting-point for the development of the doctrine, and appears in the

¹For the ancient materialist school (Cārvāka's or Lokāyata's) reject all other sources of knowledge, even inference (SDS chapter 1): and the Buddhist sceptical school (śānyavādins or 'nihilists') although in a certain sense rejecting all means of knowledge, nevertheless accept perception and inference as practically valid.

Nyāya, Vaišeṣika and Mīmāmsā sūtras¹. But the ambiguous character of the 'object' suggested doubts as to its reality at a very early period: so that the defence of the validity of perception assumes at a very early stage the form of a 'refutation of idealism'. An early statement² of this refutation is fortunately

The reference in the $M\bar{\imath}m\bar{\imath}m\bar{\imath}s\bar{s}$ $S\bar{u}tra$ is I. i. 4—satsamprayoge purusasyendriy $\bar{u}n\bar{u}m$ buddhijanma tat pratyakṣam, animittam vidyam $\bar{u}nopalam$ bhanatr $\bar{u}t$. 'Perception is the arising of knowledge when a man's senses are m contact with reality. It is not a means (of knowing duty) as it apprehends what now is ''. Uddyotakara (NV p. 45 l. 10) quotes the first part of this s $\bar{u}tra$ and notes that the $M\bar{u}m\bar{u}msaka$ commentators themselves would agree with his criticism of it as an inadequate definition. Their position, in fact, is that it is not a definition, although the 'vrtlik $\bar{u}ra$ ' attempted to treat it as such even emending the text of the $s\bar{u}tra$ to suit his interpretation.

It is worth noting that Sabara in his comment here uses language which suggests that he had the definition of the $Ny\bar{a}ya$ $S\bar{u}tva$ in mind: e.g. he substitutes the term samnikarsa for the samprayoga of the $s\bar{u}tra$: and his $tatp\bar{u}rcakatva$ (sedependence of inference on that, i.e., on perception) seems an echo of the word $tatp\bar{u}rvakam$ in NS I., i. 5.]

²Sanikara's classical refutation of idealism in his commentary on Vedānta Sūtra. II. ii. 28—32 is at least four centuries later. Jacobi has argued in an article on the Date of the Philosophical Sūtras (JAOS xxxi 1911) that the early passages in the sūtras and in Sabara's Bhāṣya and the Nyāya-bhāṣya which appear to refute idealism are not really refutations of idealism (vijūānavāda) but of nihilism (sūnyavāda): and that Kumārila is wrong in interpreting half of the present passage in Sabara as directed against the nirālambanavāda (i.e. vijūānavāda), the truth being that the whole is directed against the sūnyavāda. Jacobi's argument appears to be justified as against Steherbatsky's view that these passages in the earlier sūtras and bhāṣyas have in view the vijūānavāda or idealist doctrine as promulgated by Asanga and Vasubandhu, and are therefore relatively late. But it seems clear that, though the sūnyavāda or nihilist doctrine was historically prior to the developed idealism of the vijūānavāda (which was in fact a watering down of the pure gospel of nihilism), yet the doctrine that ideas have no objects beyond themselves was, or became, a moment in the nihilist dialectic, logically prior to complete

¹NS 1. i. 4 indriyārthasamnikarsotpannam jūūnam avyapadešyam avyabhicāri vyavasāyātmakam pratyakṣam. ''Perception is knowledge arising from contact of organ with object: it is independent of verbal expression, unerring, and has the form of conviction ''. VS III. i. 18 ātmendriyārthasamnikarṣa, and III, ii. 1 which adds manas as a tourth factor in the contact which is the condition of cognition. Praśastapāda's catuṣṭaya, or four factors in the contact which is the condition of some kinds of perception, seems to derive from these sūtra's. (There is no formal definition of perception in the VS. The fourfold contact of soul, sense-organ, internal organ, and object is said to condition pleasure and pain in VS V. ii. 15 atmendriyamanorthasamnikarṣūt sukhaduḥkham. That is why, as Uddyotakara explains, the word jūūnam, cognition, is inserted in the NS definition of perception). There are several passages in VS which refer to perception, and Praśastapāda's account of it is partly derived from these. A list of these passages is given by Faddegon, p. 281, with Nand Lal Sinha's translation.

preserved in Sabara's $Bh\bar{a}sya$ on the $M\bar{\imath}m\bar{a}msa$ $S\bar{u}tra$, and forms a convenient preface to the doctrine

of perception.

The 'vrttikāra's' refutation, embodied in Sabara, falls into three parts each of which meets a distinct difficulty: and the first and third parts deal with the two difficulties which, according to Vatsyavana's interpretation, led to the insertion into the Nyāya Sūtra definition of the two words avyabhicāri and avyapadeśyam². The second part meets the 'idealistic' argument from dreams which is dealt with in a later section of the Nyāyasūtra in the course of a polemic against Buddhist views3. The three diffi-culties are (1) the existence of erroneous perculties are (1)* the existence of erroneous ceptions' side by side with true perceptions; (2) the existence in dreams of 'perceptions' which admittedly have no basis (nirālambana) in an external object present to sense, and (3) the impossibility of characterising (vyapadis-) cognitions without reference to the objects cognised, so that thought without things

scepticism (as it was historically prior in the listory of English philosophy, Hume building on Berkeley's premises). Kumā ila is thus justified in saying that it is after setting aside the reality of the o ject that the supposition of a similar unreality in the idea itself is made: at I that Sabara in his $Bh\bar{a}sya$ has undertaken to examine the reality or unreality of the external object because this is common to both views (idealism and nihilism) and because it is the basic doctrine (Sloka Vārtika, nirālambanavāda, verses 15-16).

The Mīmānisā is not really a philosophical work but a system of exegetics. But the first section of the first chapter (commonly called the tarkapāda or logical section) of Sabara's Bhāsya deals with certain logical topics (pp. 1—38 in the Bibl. Ind. ædition), and has an important place in the history of Indian thought inasmuch as it is the basic text of the two distinctively philosophical Mīmānisaka schools founded by Prabhākara and Kumārila. The latter's Slokavartika is a comment on this section of the Bhāṣya of Sabara. Sabara fortunately quotes a long passage from an earlier commentator (the variously identified anonymous 'vṛttikāra') which comprises—as Jaçobi has shown, log. cit.,—the refutation of idealism or nihilism. Jacobi identifies the argument of this passage with that of Vedānta Sūtra II. ii. 28—32 (but not with Samkara's interpretation of that passage) and with that of Nyāya Sūtra IV. ii. 21 seq.

²The vrttikāra passage commencing S. Bh. p. 9 l. 11 is so closely parallel to Vāṭsyāyana's difficult exposition of the word avyapadesya in N. Bh. p. 12°1. 3, p. 14 l. 6, that the two passages are mutually explanatory,

*NS IV ii. 31.

seems empty, void, or nothing $(\sin ya)^1$. And, as things have already been shown to be unreal, the paradoxical conclusion emerges that everything is void-and-nothing $(\sin yavada)$.

A. FIRST DIFFICULTY

SECTION 2. PERCEPTION AND ERROR

The argument in Sabara is as follows:—The opponent says that the means of cognition need examination, because they sometimes err (vyabhicārāt parīkṣitavyam). "For inasmuch as mother of pearl has the look of silver, thereby perception errs; and inference and the other means of cognition err because they are based on perception." It is replied: "This is not so. That which is really perception does not err; and what errs is not perception". The opponent asks for a definition of perception so understood, and the vṛttikāra answers with an amended version of the sū†ra:—tatsamprayoge puruṣasyendriyānām buddhijanma sat pratyaksam—"When a man's sense-organs are in contact with that, the arising of cognition is

^{&#}x27;The three difficulties, and the three parts of the 'refutation', are accordingly treated in three distinct sections by Kumārila in the Ślokavārtika, viz.—(a) verses 17-26 of the section Autpattikasūtra, which are separated under the title Vrttikäragrantha (Kumärila regarding this part of the argument only as a citation of the Vrttikāra's view). (b) the two hundred couplets of the Nirālambanavāda section (c) the two hundred and sixty-four couplets of the Sūnyavāda section. (But Kumārila treats specifically of perception in the two hundred and fifty-five couplets of the section Pratyakyasūtra). It has been noted above that the recognition of the second part of the refutation as dealing with a distinct 'idealistic' moment in the opponent's argument does not imply that the passage refers to the school of Buddhist idealism (vijnānavāda) which developed later than the sūnyavāda school. The Sarvadarsanasangraha distinguishes, in complete nihilism (sarvasunyatā), the two elements of annihilation of the external (bāhyārthasya sūnyatvam) and annihilation of the internal (antarasya sūnyatvam). It represents the original doctrine as comprising both elements, and says that the Idealists (Yoyācāras i.e. Vijāānavādins) accepted the former but refused #5 accept the latter.

true perception". In other words, perception, properly so called, is cognition which has as its object the very thing with which the sense-organs is in contact (yadrisayakam jñānam, tenaira samprayoge'). The opponent asks: "How is it known that in the one case (i.e. that of real perception) the organ is in contact with an object which is the object as-cognised, while in the other ease (that of error) it is in contact with something other than the object-as-cognised? A man who apprehends silver where there is actually mother of pearl thinks that his visual organ is in contact with silver". The reply is that it is known when a conflicting cognition arises, so that the man says to himself 'this was a mistaken cognition and arose when the organ was actually in contact with something different.'-Yes, but how could it be known before the conflicting cognition arose? since at that time there was nothing to distinguish a true perception from an erroneous apprehension.—It is answered that false cognition arises when either the organ is affected by Tobscurities or the object by impediments to perception such as minuteness. Contact of organ and object is the cause of (true) perception, while defects affecting either factor (organ or object) are the cause of false apprehension.—Yes, but how is it known that defects are or are not present? The answer is: "If after looking for defects carefully we do not find them we accept the experience as not impaired by defects: because there is no proof that it is so impaired?".

^{**}Cf. the brief Natudyika characterisation of true cognition as tasmins tad iti jūānam—''knowledge of that as that''. Kumūrila (Slokavārtika, Pratyāksasūtra, 1, 42) explains prauoga as operation (vuāpāra)—not necessarily implying contact. But he appears to hold that the Sāmkhya explanation of perception as contact had not been shaken by Bauddha criticisms.

²The onus probandi is thrown on the doubter of the validity of perception. The mere fact that error exists does not carry with it the implication that there is no truth.

Vātsyāyana, commenting on the word avyabhi $c\bar{a}ri$ in the definition of perception given in the $Ny\bar{a}ya$ $S\bar{u}tra^{\dagger}$ answers the same objection to the validity of perception in the same way².

"In the summer the sun's rays commingle with earth-warmth and become tremulous. These coming in contact with the visual organ of a person at a distance," the cognition of water 'arises from contact of organ and object. And (as it 'arises from contact of organ and object') it would turn out to be perception' (and so perception, which is supposed to be a pramāṇa, an instrument of pramā or truth, is an instrument of error).

"It is with reference to this possible objection that the word avyabhicāri is introduced into the definition. Cognition of 'that' in what is not that (atasmins tat) is characterised as vyabhicāri: while cognition of 'that' in what is that is avyabhicāri. non-erroneous. Perception is non-erroneous cognition'".

The first phase of the discussion of error in perception may be regarded as ending with the limitation of the name perception to true cognitions of sense. But obviously the difficulty can recur in an acuter form as soon as analysis reveals the distinction between the 'bare impression of sense' and 'fictions

of dispersion affects it and impairs its efficacy.

'So too the Buddhist describes it as abhrānta which=avyabhicāri.
But his addition of kalpanāpodha transforms truth of perception into novel

shapes.

^{&#}x27;It seems clear that MS I. i. 4 was intended as a definition of perception: and that NS I. i. 4 belongs to a later time when the inadequacy of the $M\bar{\imath}m\bar{\imath}nis\bar{\imath}s\bar{\imath}$ definition had been realised. Vātsyāyana's interpretation of NS I. i. 4 appears to represent truly the meaning of the $s\bar{\imath}trak\bar{\imath}ra$: and the general similarity of his point of view to that of the ' $rrtik\bar{\imath}ra$ ', in Sabara indicates that they belong to the same phase of thought.

²NBh. p. 14 l. 6. ff.

The person is at a distance, but not his 'visual organ': for this is not the eye but the visual light or ray which goes out and comes into actual contact with the object. But if it has to travel far to the object some sort

of imagination': for the application of the formula fasmin tad iti jnānam—'knowing that as that'—is seen to be less simple than it looked at first when the ideal element' in perception is insisted on. The discussion then passes into another phase: a phase which may be said to crystallise in the term kalpanāpoḍha, 's stripped of ideas, 'by which Dinnāga describes pure perception.

B. SECOND DIFFICULTY

SECTION 3. PERCEPTION AND DREAMS (IDEALIST ARGUMENT)

The second part of Sabara's argument' is the part to which the appellation of a refutation of idealism may most appropriately be given, the analogy between perception and the baseless fabric of our dreams being in the characteristic vein of idealism.

The objector argues: 'All ideas are without external objects, like dreams (sarva eva nirālamban-āḥ svapnavat pratyayāḥ). An idea has no ground in external objects: reality (svabhāva) is falsely attributed to a dream; and the waking person's apprehension of 'a post' or 'a wall,' too, is no more than an idea (pratyaya eva); and therefore it, too, is not grounded in any external object (tasmāt so 'pi nirālambanaḥ)'.

It may be said in reply:—The waking man's apprehension of a post was perfectly certain (supariniscita): how shall it prove false?—But the apprehension in the dream was perfectly certain in exactly the

¹Both this and the third part of Sabara's argument (Sābarabhūṣya p. 8 J. 22 to p. 9 l. 11; and p. 9 l. 11 to p. 10 l. 10) are translated by Jacobi in the article in JAOS xxxi above referred to. Keith gives an account of Samkara's parallel refutation in Buddhist Philosophy (Oxford 1923) p. 265. See also Thibaut's translation of the Vedāntasūtra and Samkara's Commentary in Sacred Books of the East, v. XXXIV, pp. 418—428.

same way: prior to waking there was no difference in this respect.—But there is a difference, for dreams are found to be erroneous, while error is not found in the waking cognition.

The opponent retorts that his point is that error will be found in waking cognition, seeing that the waking cognition resembles dream-cognition (tatsā-mānyāt). If the dream-cognition is false because it is an idea (pratyayatvāt), the same must be true of waking-ideas. The mere fact of having an idea is enough to establish falsity,—and it is impossible to say that waking-cognition is other than an idea.

The answer to this is that the falsity of dream-cognitions is known from something else than from their being ideas, namely from their conflicting character. And if it be asked 'whence comes this conflicting character?' the answer is that it comes from the impaired efficacy of the internal organ in sleep. 'Sleepiness is the cause of the erroneous character of dream-ideas. Therefore a waking person's ideas are not erroneous (since then the internal organ is not thus impaired).

To the objection that when a person is awake, too, there may be defects in the instruments of cognition which cause falsity of ideas, the answer is that if there were such defects they would be known.—As for the objection that at the time of having the dream-ideas the impairment of the internal organ is not realised, though present, the answer is that on waking the person realises that his internal organ was overcome with sleep.

^{&#}x27;Jacobi takes $tath\bar{a}bh\bar{u}va$ to mean 'being so', i.e. 'being the'. I have taken it as standing for the $mithy\bar{a}bh\bar{u}va$ of the preceding clause. He reads the textual $pratyayatv\bar{u}t$, instead of the variant reading $pratyay\bar{u}t$, which I adopt.

SECTION 4. DIALECTIC OF WHOLE AND PART

The treatment of the dream-argument in the $Ny\bar{a}ya$ is confined to four sūtras (NS IV. ii. 31-34) and forms a small part only of the general polemic directed against the Buddhist denial of reality (NS IV. ii. 4-37). The general purport of the sceptical dialectic which this passage as a whole meets is perhaps best described in a couplet found in the $Lank\bar{a}vat\bar{a}ra$ $S\bar{u}tra$ —

buddhyā vivicyamānānām svabhāvo nāvadhāryate ato nirabhilapyās te niḥsvabhāvāś ca darśitāḥ².

²This' is the form in which it is quoted in the Sarradarsanasangraha (chapter on Bauddha system); but in the Lankāvatāra Sūtra itself the second line runs—

tasmād anabhilapyās te niķsvabhāvās ca desitāķ. .

And I think that other supposed "verbatim quotations from the Mādhyamika Sūtra" are in the same way 'tags'. If we could be sure that Nāgārjuna was the first formulator of these formula the case would be different. As it is, all that can be said with safety is that the Nyāya Sūtra

The resemblance between the language of this couplet and that of NS IV. ii. 26—buddhyā vivecanāt tu bhāvānām yāthārthyānupalabdhis, etc. is pointed out by Vidyāhhūṣaṇa HIL, p. 46. But the Lankāvatāra shows prophetic knowledge of things which happened long after the latest possible date for the composition of the Nyāya Sūtra, as appears from Vidyābhūṣaṇa's account of it in JRAS 1905-see Keith ILA, p. 23. Vidyābhūṣaṇa draws attention to similar parallelisms between Nagarjuna's Mādhyamika Sūtra and the Nyāya Sūtra (HIL, p. 46, see Keith ILA, p. 23). But any inference as to the chronological relations of these works has to take into account the (improbable) supposition of later interpolations in the Nyāya Sūtra: and also the (probable) contingency pointed out by Gopinath Kaviraj in pp. 12-13 of his introduction to Ganganatha Jha's translation of the Nyaya-that 'tags' pass on from author to author in much the same phraseology, and that such 'tags' may be much earlier than the work in which we first happen to meet with them. Thus one of the parallelisms (between NS IV. ii. 32 and Mādhy. $S\bar{n}tra$ VII. 34=p. 177 of Poussin's edition) is parallel again to Patanjali's Mahābhāsya on Pāṇini IV. i. 1 (Kavirāj, loc. cit.) So that inference is precarious. See next note also.

This occurs at II. 175 and again at 1. 167 of the long verse section which ends the book (p. 116 and again p. 287 of Bunyiu Nanjio's edition, Kyoto, 1923). Cf. the phrase buddhyā rivityamānam in a line occurring at II. 198, repeated in the concluding section 1. 374. It is in this phrase alone that parallelism to NS IV. ii. 26 is to be found. And the phrase seems to be a 'tag' which would be found in other works as well: and this being so the suggestion that the Nyūja Sūtra echoes the language of the Laūkūratāra would seem to be groundless: for the other parallelism which Vidyābhūṣaṇa refers to (NS III. ii. 11 and Laūs. VI. 19) is even less significant than this as evidence of connection. The suggested parallel between NS IV. ii. 32 and Mādhy. S. VII. 31 is again a tag found in a score of passages in Laūkūvatūra.

"When things are analysed by the mind no reality is found in them. Therefore they are said to be 'inexpressible' and 'without reality'.'' When we start to analyse the supposed external object in the hope of finding what it really is in itself—its svabhāva or essence—we find that it disappears under analysis. First we try to think of the thing as a composite Whole (avayavin, a possessor of parts): and the Nuāya Sūtra has maintained in a previous passage (II.i.33 seq.) that the whole is something more than the parts, principally on the ground that otherwise perception would altogether be impossible—component parts being ultimately atoms, which are imperceptible; and that it is impossible to arrive at a perceptible by summing up imperceptibles¹ In the present passage (IV.ii.4-17) the Bauddha arguments against the reality of the whole are first reviewed. If the parts reside in the whole do they reside in the whole of the whole or in parts of the whole? The former alternative is absurd, the latter amounts to saying that the parts reside in themselves, i.e. not in the whole. And if the whole resides in the parts2, does it reside as a

repeats the formule of Buddhist śūnyavāda philosophy. If and when we can settle the period at which these formulæ first became current we shall have fixed the terminus a quo for the composition of these passages in the Nyāya Sūtra. But not even then for the composition of the whole Sūtra, perhaps. For there are certain indications of dislocation at NS IV. i. 3, felt by the commentators (see Gangānātha Jrā's footnotes to p. 159, Vol. IV of his translation).

¹Compare Leibnitz's argument for 'petites perceptions'.

²The sūtrakūra's own position is said to be that the whole resides by relation of samavūya in the parts. The v.hole is a constituted effect, the parts its constituent cause. The constituted resides (samavēta) in its constituents. This is the commentators' explanation, based on the doctrine of samavūya imported from the Vcišesika system. Taking the present sūtra passage at its face-value, however, it seems that the sūtrakūra intends sūtra 11 as an answer to both alternatives, i.e. he means that the questions (a) whether the parts reside in the whole of the whole or in its prets (b) whether the whole resides in the parts as a whole or by parts, are both questions which ought not to be asked.

In this connection the interpretation of IV. ii. 3 is important. On the face of it the sūtra denies the reality of wholes: though only by implication tannimittam tv avayavyabhimānaḥ—"the cause of these defects (lust, etc.) is the conceit of wholes", i.e. if men conceived of women as mere aggregates

whole in each part, or by parts in the parts? The former alternative is absurd, the latter destroys the wholeness of the whole.—The question is not a possible one (apraśna) answers the Naiyāyika: for it is absurd to introduce into the whole itself the distinction between whole and parts which is involved in asking whether the parts reside in the whole of the whole, and whether the whole resides as a, whole in the parts.—As to the argument which the Naiyāyika has used to establish the reality of wholes, viz., that otherwise perception would be impossible, the opponent suggests that the supposed perception of the whole is really the confused perception of the parts, as in the perception of hair (when the separate hairs are not distinctly seen). •The answer is that distinctness and indistinctness of perception are always relative to the perceptible: and the notion of indistinct perception of the imperceptible atoms is absurd'. So that perception would be impossible unless the whole were something more than a cloud of atom's. But the opponent's dialectic is based upon an

¹Perception does not function beyond its proper sphere (svavisayānatik gamena indriyasya pravrttih). And the imperceptible is beyond the

sphere of perception, indistinct or distinct.

of unpleasant physical constituents, bones and blood etc., there would be cessation of desire. The commentators say that this has no reference to the reality of wholes, but merely teaches a useful moral device. And yet, if the whole is a reality, human nature has a retort ready for the moralist. So that it seems just possible that IV. ii. 3 really does belong to a phase of Naiyāyika coctrine which had not yet adopted the characteristic teaching of the reality of wholes. In that case the passages II. i. 33-36 and IV. ii. 4-17 would have to be considered later additions—and this would lend colour to the view that the whole of the passages polemising against Buddhism (II. i. 32-36 and perhaps 39-43; III. ii. U-17; IV. i. 34-40 and 48; IV. ii. 4-37) are later additions. That there is a certain dislocation at IV. ii. 3 has already been remarked; and it'may be added that IV. ii. 38 resumes the topic of tattvajnana broken off after IV. ii. 3. See Keith ILA, p. 25, second half of footnote 2; Vidyābhūṣaṇa's translation of Nyāya Sūtra (in Sacred Books of the Hindus, Allahabad), introduction p. x, and his HIL, pp. 46—50. Vidyābhūṣaṇa's attempt to distingnish 'Gautama' from 'Akṣapāda', and his assertion that Vātsyāyana interpolated into the sūtras the passages dealing with Buddhism, need not be taken seriously. On the other hand it is likely that the Nyāya Sūtras grew rather than were made, and that their final form (which may have been achieved in the third gentury A. D.) is a final reduction and not a first composition.

appeal to the very perceptual experience which it would thus render impossible: and so it is suicidal.

In the next section the opponent proceeds to attack the reality of the concept of parts.

The dialectical difficulties about part and whole would continue up to a total disappearance of the supposed object1. You may try to avoid this consequence by asserting the reality of the minute (anu), or of that which is beyond division—the "atom". But in fact you cannot avoid thinking of the atom as having parts: in the first place because it must be thought of as split into fragments or permeated by the 'ether' which you call all-pervading, but which would not be all-pervading if it were not within as well as without the atoms.—To this point the reply of the Nyāya Sūtra appears to be that this vyatibheda or permeation is in fact a notion only applicable to things which have constituent parts (kāryadravya), because 'within' and 'without' imply further parts (karanāntara)3. The all-pervadingness of other is attributed to it on other grounds⁴ than on the absurd supposition of its pervading the atom. The opponent says, in the second place, that the atom must be thought

^{*}sutra's 15—17 are the connecting link between the attack on the whole and the attack on the atom, i.e. the ultimate part which as having no parts would not be exposed to the preceding dialectic. Parts which are not ultimate could be shown to be unreal by this same dialectic—avayavāvayaviprasangas caiwam ā pralayād.

²param trutch exactly translates the Greek atomos.

The $Ny\bar{a}ya$ and $Vai\acute{s}e\acute{s}ika$ accepted the physical theory of atoms, but they were neither of the n metaphysical atomisms,—as Buddhism was. The $Naiy\bar{a}yika$ acceptance of the avayavin, the whole as a reality, and the $Vai\acute{s}e\acute{s}ika$ doctrine of $samav\bar{a}ya$, the relation by which parts constitute a whole, and of the reality of the universal $(s\bar{a}m\bar{a}nga)$, are diametrically opposed to atomism. It is the sarvam prthak, sarvam ksanikam—everything is separate, everything is instantaneous—of Buddhism that is the real atomism .

 $^{^{}s}k\bar{a}rya$ in such a context means a whole and $k\bar{a}rana$ means the parts which constitute, or are the $samav\bar{a}yik\bar{a}rana$ of, the whole.

⁴Stated in the next two sūtras 21-22.

of as having parts because figure or shape implies an arrangement, which again implies parts to be arranged: and further because an atom is thought of as being in contact with other atoms—which means that the atom on one side is in contact with one part of it, and the atom on another side is in contact with another part of it.—To this very awkward difficulty the $Ny\bar{a}ya$ $S\bar{u}tra$ finds no specific reply, and contents itself with re-assertion of the impossibility of infinite division.

The opponent then retorts—if there really were external objects, it would be true that infinite divisibility would be impossible. But our whole point is that thought, on which you rely as having these external things for its objects, is in fact illusory. "As a result of analysis

On Epicurus' view therefore the atom has parts; but parts 3 abiding from all eternity in unchangeable juxtaposition "-sunt igitur solida primordia simplicitate quæ minimis stipata coharent partibus arte, non ex illarum conventu conciliata. (Lucr. I. 609).

Epicurus therefore finds some sort of answer to the difficulty here But Indian physics conceives the atom as a minimum, calling it always by the name anu or paramagu (-minimum), and having no term which gives the precise sense of atomos-though of course the paramanu being a minimum is also indivisible. If the atom is a minimum, and at the same time figured, there is no escape from the difficulty which the opponent here raises.

It would be possible to find an echo of Greek thought in the alternative offered in IV. ii. 16 and 17. Cf. Keith ILA, pp. 17-18.

²Vātsyāyana supplies the connection of thought thus. Yad idam bhavān buddhīr āśritya buddhiviṣayāḥ santīti manyate, mithyābuddhaya etāḥ. yadi hi tattvabuddhayalı syur, buddhyā vivecanc^e kriyamāne yāthātmyam buddhivişayānām upalabhyeta (NBh. p. 233 l. 6 on NS IV ii. 25). Steherbatsky argues on the authority of Vācaspati Miśra that this section (sūtra's 26-91) is directed against the vijnānavāda; but Jacobi has shown that it is still against the śūnyavādin that the Nyāya Sūtra argues. But, as has been

The assumption being that atoms must have some shape or other, being finite corporeal things. Epicurus, in view of the difficulties arising from allowing that atoms have extension and shape, maintained that the atom is not the minimum, but the indivisible. It seems to me that it is precisely these two views of the atom-as the minimum, and as the indivisible-that are stated as alternative possible views in NS IV. ii. 16 and 17: na pralayo 'nusadbhāvāt: param vā trutch. "The external object does not vanish (as the result of endless division into parts), because a minimum remains. Or else something which is beyond division ". See H. A. J. Munro's Lucretius, Vol. II, notes, on Lucr. I. 599-631, for Epicurus' statement: ἄτομος ούκ ὅτι ἐστὶν ἐλαχίστη ἀλλ΄ ὅτι ὀν δὐναται τμηθῆναι. "what is asserted in the name 'atom' is, not that it is a minimum, but that it cannot be divided.

by thought we fail to apprehend any reality in the supposed existents: we find reality in them no more than we find reality in the cloth when the threads are taken away'' (IV-ii-26)¹. When we analyse the cloth into this that and the other thread there is nothing left to be the object of the conception 'cloth': and everything alike dissolves in this way on analysis.—The reply given is that the reasoning of the opponent is self-contradictory and therefore false (vyāhatatvād ahctuh IV-ii-27); which Vātsyāyana explains to mean that the 'analysis by thought' spoken of by the opponent implies that there is something to analyse after all².

Of course the whole cannot be apprehended apart from the parts—the cloth cannot be apprehended apart from the threads—for the simple reason that the whole is grounded in the parts (tadāśrayatvāt—28).—The opponent's reasoning is further self-contradictory because in asserting the unreality of everything it denies the existence not only of the objects of knowledge (pramēya) but also of the instruments of knowledge (pramāṇa)³. But

said, there is an 'idealistic' moment in the $\hat{sunyav\bar{a}da}$ argument. It is this aspect of the sceptical dialectic to which we pass in the present passage. See also supra, p. 30 n. 1.

See above, footnotes to p. 85. If this were a verbatim quotation from Lankāvatāra Sūtra, as Vidyābhūsana asserts, the fact would support Steherbatsky's view: for the Lankāvatāra is a vijnānavādin work. (The earliest Chinese version is statted to have been made in 443 A.D. It would appear that this version does not include the concluding section in which there is a prophecy of Barbarian kings following the Guptas—obviously referring to the Huns, i.e. to a period after 450 A.D. The remainder of the work must be earlier than 443. There is a reference to Aksapāda—but this too is in the concluding section xx.)

²The sceptical position is always suicidal, so that it can always be met by the argumentum ad hominem.

The argument here moves to a new phase, with the realisation that the sceptic is destroying not only the objects of knowledge but knowledge itself. And it seems to be in this connection—in support of the denial of the reality of the instruments of knowledge, the pramāṇas,—that the analogy of dreams was first employed. For dreams are not only without real objects, but also without any logic or criterion of reality. Therefore what I have called the idealistic moment in the sceptic's argument was not originally employed to prove the unreality of the external world (the idealist's position)—that had already been done by the dialectic of part and whole—but to round off the

it is by these instruments of knowledge that we establish either that (as we hold) analysis reveals the reality of objects or that (as the opponent argues) it fails to reveal any reality (sutra 29). If the sceptic's position that nothing exists can be proved, then proof at least exists: if it can not be proved, and is a mere assertion without any proof,—then why should we not assert without proof the contrary, proposition that 'everything exists'? (pramānānutpatty-utpattibhyām IV-ii-30. 'By both alternatives—impossibility of proofs or possibility of proofs'—the opponent's position is contradicted).

It is not until the argument has reached this stage that the sceptic unmasks his real position, which is that there is in fact no such thing as proof,—the whole conceit of proof and things to be proved is like a dream and a mirage². The Nyāya Sūtra (33) says that 'this is not established, because there is no reason to prove it: which Vātsyāyana interprets to mean that the unreality of dreams can only be known by contrast with the reality of things apprehended in the waking state. If you argue

argument into complete scepticism (sarvaśūnyatāvāda). That is why Nāgārjuna uses it. But of course the dream-argument lends itself to the disproof of the reality of external objects, and the idealist adapted it to that use. That is why the dream-argument is found in an idealist work such as the Laūkāvatāva Sūtra. The later Indian commentators take it as a specifically rijūūnavāda argument: and Steherbatsky follows them. But had it been so it would not be found used by Nāgārjuna in the Mādhyamika Sūtra.

Perhaps Vātsyāyana refers here to the sarvāstirādin school of Bauddha philosophy—" there is then nothing to choose between you sūnyavādins and your extreme opposites in the Bauddha schools, who maintain that everything exists".

²svapnavişayābhimānavad ayam pramānaprameyābhimānah (sūtra 31). māyāgandharvanagaramīgatīṣṇikāvad vā (sūtra 32).

Vidyābhūṣaṇa (IIIL, p. 46) regards this as an echo of Mādḥy. Sātra, VII. 34:---

yathā māyā yathā svapno gandharvanagaram yathā, tathotpādas tathā sthānam tathā bhanga udāhṛtam.

This is the concluding couplet of the section in which Nägärjuna applies his destructive dialectic to the threefold notion of origination, subsistence and destruction ($atp\bar{a}da$ -sthit-bhanga). It answers the objection—"If these notions are meaningless, what did the Buddha mean by using them in his teaching?" Thus, although not used in just the same context as the dream-analogy is used by the opponent in the $Ny\bar{a}ya$ $S\bar{a}tra$, the couplet still has in Nägärjuna the same general function of rounding off the sceptical dialectic.

that dream-objects are unreal because they are not perceived when a man wakes, you must also admit that waking objects are real because they are perceived when the man is awake: for reality or existence is the criterion of unreality or non-existence (bhāvenābhāvah samarthy-ate)¹.

The other objection urged in the Nyāya Sātra against the dream-argument is that "the conceit of an object in dreams is like (the objects of) remembrance and desire." Vātsyāyana explains that as the object of remembrance and desire is something previously experienced, so is the object in dreams. We do not argue that the objects of memory and desire have no basis in reality, merely on this ground: neither ought we to do so in the case of dreams. For they have a basis in reality. And it is only with reference to the real basis or originals of dreams (āśraya, pradhāna) that the waking man pronounces his dreams unreal.

Comparing the treatment of the dream-argument in \$\sidesabarabh\bar{a}sya\$ with its treatment in the \$Ny\bar{a}yabh\bar{a}sya\$ it is clear that the idealistic aspect of that argument is prominent in \$\Sabara\top-dreams\$ are illusory because they are ideas (pratyayatv\bar{a}t);—and that, for him, it has disengaged itself from the \$\sidesanyav\bar{a}da\$ context in which it was undoubtedly first employed. V\bar{a}tsy\bar{a}yana, on the other hand (and of course the \$Ny\bar{a}ya S\bar{u}tra)\$, nowhere suggests that ideas, as such, are their own objects, so to speak: and the dream-argument remains for him a mere adjunct of the main line of thought—viz., that analysis fails to find reality in the object. In the absence of the technical

^{&#}x27;Vāts āyana's use of the lamp-simile here is not clear, nor is the reading cer ain. We want him to say that the light of truth must be present in one case if we are to argue its absence in the other case. He says that you can only argue from non-apprehension to absence if the thing is not absent in both cases—yathā pradīpasyābhāvād rūpusyādarśanam iti; '.' we say 'colour is not apprehended because the lamp is absent '.'. The meaning apparently is that we can say this only because the lamp is present in other cases when we see the colour.

terms of the $vij\tilde{n}\bar{a}nav\bar{a}da$ in Sabara's account, it would be wrong to suppose that Sabara is polemising against the developed $vij\tilde{n}\bar{a}nav\bar{a}da$. But this much may be said that he seems to be dealing with a type of $\tilde{s}\bar{u}nyav\bar{a}da$ which is different from that of Nagarjuna i.e., from that type with which the $Ny\bar{a}yas\bar{u}tra$ and $Ny\bar{a}yabh\bar{a}sya$ deal: he seems to deal with a $s\bar{u}nyav\bar{a}da$ which stresses the dream-argument in such a way as to bring out its idealistic implications and to make it fundamental.

C. THIRD DIFFICULTY

SECTION 5. DISTINCTION BETWEEN THOUGHT AND OBJECT

The third part of the defence of perception in Sabara's $Bh\bar{a}sya$, a translation of which is now given, attacks a view that ideas themselves are in some sense 'void'—empty, or nothing $(\sin nya)$. In one sense it has already been shown that ideas are 'empty', seeing that it has been shown that their supposed objects are non-existent. But the argument is now carried a step

'Jacobi's strongest point against the view of Stcherbatsky that the early $s\bar{u}tra$'s and $bh\bar{u}sya$'s polemise against the $vij\bar{u}\bar{u}nav\bar{u}da$, is the absence from them of the peculiar phraseology of $vij\bar{u}\bar{u}na$ and $\bar{u}layavij\bar{u}\bar{u}na$.

Jacobi finds in this passage of Sabara's bhāṣya a commentary on Ved. Sūtra II. ii. 28—32 (the polemic on Buddhism, parallel to the passage from the Nyāya-Sūtra which has just been dealt with). He draws attention to a reference to Sabara in Sankara's commentary on Ved. S. III. iii. 53, which seems to indicate that a commentator might well say by anticipation in comment on the Pūrva-mīmānsā what would have been in place rather in comment on the Vedānta or Uttara-Mīmānsā; the two systems being at first what their names implied,—parts of one whole. He believes that the vṛttikāra here quoted by Sabara is one Bodhāyana author of a comment on Vedānta.

The Ved. S. passage runs: - 28. nābhāva upalabdeh,

^{29.} vaidharmyāc ca na svapnādivat,

^{30.} na bhāvo nupalabdeh, 31. kṣaṇikatvāc ca,

^{32.} sarvathānupapattes ca.

[&]quot;The objects of cognition are not non-entities, because we actually perceive external objects. Nor is our cognition similar to dreams, because there is a difference between waking-cognition and dream-cognition. The idea cannot be the object because it is not the idea which forms the object of our apprehension. Also because ideas are momentary. And (the opponent's position is absurd) because it is altogether impossible ". (This follows Jacobi's interpretation).

further, with the assertion that the 'idea' cannot be

distinguished from the 'object' of the idea1.

Why not say that it is the 'idea' that we perceive, in place of importing a superfluous 'object'?—Sabara replies² that we can and must distinguish the 'object' from the idea. Besides, ideas cannot be (as the Bauddha here suggests, and as the Naiyāyika maintains) perceived³.

And, thought being for the Bauddha a series of instantaneous ideas, the supposed self-conscious (samvedya) nature of thought is as inconceivable as the Naiyāyika 'inner sense' account of the perceptibility of ideas. Knowledge is presupposed by objects, but is not the object of our perception: the object of perception being the 'object' (as opposed to the idea); and the existence of ideas being inferred thence. The idea is designated by the name of the object of which it is the idea; and cannot be otherwise designated (avyapadeśya): and this indesignableness proves that the idea as such is not perceived. (But it does not prove that the idea does not exist.) Sabara⁵ says:—

be met by the word avyapādešyā in NS 1. 1. 4. See below.

"Like Hylas (in Berkeley's Dialogues) and G. E. Moore in his

'Refutation of Idealism.'

This passage then, like that in Sabara, seems to argue against a type of scepticism in which an idealistic moment had become a relatively in portant and independent part of the argument. The last sūtra should perhaps be rendered,: "and the assertion of non-existence in toto (i.e. both of object and of idea) is absurd because impossible."

It is however possible that the Nyāya and Vedānta are attacking the same view, but make it look different by difference of selection and emphasis.

'It is this assertion which, according to Vātsyāyana, is intended to be met by the word avyapādešya in NS I. i. 4. See below.

³This is a point of difference between the Nyāya and the Mīmāmsā. The Nyāya teaches that cognition is a 'quality' of the soul, perceived like any other quality by contact with the sense-organ,—the sense-organ in this particular case being the manas or internal sense. The Mīmāmsaka denies this 'inner sense' theory, and says that the existence of apprehension is inferred.

^{&#}x27;As Vātsyāyana explains: the object is called 'ghata': and the knowledge of it (ghatajūdna) can only be referred to by the same name with an added 'iti', i.e. the same name 'in inverted commas'. To designate the idea of a pot, we say "the idea 'pot'".

5Sābara-bhāsya p. 9 1. 11 to p. 10 1. 10.

"But the idea is void—nothing. How so? Because we do not find any difference of presentational form $(\bar{a}k\bar{a}ra)$ between the thing and the cognition of it. It is our idea that is the object of perception (pratyaksā ca no buddhih), and so the supposed something in the shape of a 'thing' separate from the thought is nothing at all. -This would be so if the thought had the form of the thing: but our thought has no form (nirākāra); while the external thing has form $(\bar{a}k\bar{a}ravat)$, since it is perceived as connected with external space. For perceptual cognition has the thing for its object (arthavişayā hi pratyakṣabuddih), and has not another thought for its object (na buddhyantaravisayā). For thought is momentary, instantaneous (ksanika)2, and will not endure through the time of another thought.—The view that thought is known just in its coming to birth, and that it makes known something else, like a lamp, is wrong. one apprehends a thought where a thing is not apprehend-But when a thing is apprehended a man knows that ed. there is thought, as the result of an inference. Simultaneousness (of apprehension of the thing, and apprehension of the thought) is impossible in this matter. It may , be objected that it is after the thought has arisen that we say 'the thing is known', and not when the thought has not (vet) drisen. Therefore the thought arises first; and afterwards the thing is known. To this we reply that it is true the thought arises first: but it is not known first. For it sometimes happens that even when a thing has been apprehended we say that we have not apprehended it (jñāto py arthah san 'ajñāta' ity ucyate). Nor can we apprehend the precise character $(r\bar{u}pa)$ of the thought without designating the thing (which is the object of the thought (na ca arthavyapadeśam antarena buddheh rūpopalambhanam). Therefore thought cannot

yep. Ved. S. II. ii. 30 na bhāvo 'nupalabdheḥ.
 ²ep. Ved. S. II. i. 31 kṣaṇikatvāc ca.

be designated (na vyapadeśyā buddhiḥ)¹; and what cannot be designated is not the object of perception². Therefore thought is not the object of perception.

—Moreover, granted that in case the cognition and the object cognised were identical in form there would be no such thing as cognition, this would not establish the non-existence of the thing, which is the object of perception [arthasya pratyakṣasya sataḥ na (sc. abhāvaḥ)]. And (as a matter of fact) the thought and the thing are not identical in form; for the thought, the existence of which we infer, is without shape or form (anākāram eva): while the thing, which we apprehend as the object of perception (pratyakṣam evāvagacchāmaḥ) has shape or form (sākāra). Therefore thought has the thing as its support, i.e. depends on things (arthālambanaḥ pratyayaḥ). Moreover the thought of a cloth has a cause restricted

With this cf. avyapadesyam in NS 1. i. 4, and particularly Vātsyāvana's exposition, p. 12 l. 3 to p. 14 l. 6. The passages in Sabara and Vātsyāyana explain each other.

^{*}Reading the emendation suggested by the B. I. edn. editor, Maheśa Candra Nyāyaratna, in a footnote to p. 10, viz., avyapadeśyam ca na pratyakṣam, in place of the avyapadeśyam ca nāpratyakṣam of the text. This emendation is necessary, as the next sentence shows.

The emendation suggested by Jacobi in JAOS xxxi p. 20 n. $tasm\bar{a}n$ $n\bar{a}vyapadesy\bar{a}$ buddhih, avyapadesyam ca $n\bar{a}ma$ pratyaksam is questionable from the point of view of textual criticism and gives a meaning inconsistent both with the present passage and with the parallel passage in Vātsyāyana's $Bh\bar{a}sya$, p. 12.1.3 ff.

No doubt Jacobi desired to bring Sabara into line with NS I. i. 4. But although the statement aryapādesgam na pratyakṣam seems at first sight to conflict with the NS aryapadesgam pratyakṣam, Sabara's passage is in fact another way of saying the same thing,—at any rate the same thing as Vātsyāyana says. For Vātsyāyana's point is that the perception and the thing perceived are different, but that we use the name of the thing perceived to 'designate' the perceptual process itself: the latter being, in itself 'indesignable'—aryapadesya. This is inst what Sabara asserts in the clause na vyapadesyā buddhih. But of course Sabara draws from this a conclusion which Vātsyayana would not accept when he says apratyakṣā buddhih. For the Naiyāyika held that mental processes such as perception are themselves perceptible by the internal organ. In this he differs from the Mīmāmsaka. But both are at one, as against the Bauddha, in asserting that the process of perception is a different thing from the object perceived: and that the latter can be designated, whereas the former cannot be designated in its own form.

to the case (i.e. only arises) when threads are present (niyatanimittah tantuṣvevopādīyamāneṣu paṭapratyayaḥ): if it were not so, the idea of a jar would sometimes occur, in the case of a man with senses unimpaired, even when threads are present. But this does not happen. Therefore thought is not independent of things, i.e. it refers to external things (na nirālambanaḥ pratyayaḥ). And therefore perception is not an erroneous process (na vyabhicarati pratyakṣam)."

The passage in which Vātsyāyana explains the word avyayadesyam¹ in NS I. i. 4 is closely parallel to the

third part of Sabara's argument.

What Vātsyāyana has in mind is that there is no way of naming cognitive states except through the names of their objects. How can we distinguish the perception of colour from the perception of taste, except by saying that the former is the apprehension of colour—'rāpam iti jānīte',—and that the latter is the apprehension of taste—'rasa iti jānīte'?

The words 'rūpa', 'rasa', denominate the object of the perceptions (viṣayanāmadheya), and not the perceptions as such. And yet thereby (tena—viṣayanāmadheyena) the perceptions are in fact expressed (vyapadiśyate).

From this, which Vātsyāyana would accept as so far a correct statement, some appear to have drawn a further

^{&#}x27;Vācaspati Mykra does violence to the Sūtra and Bhūyya in his anxiety to father on the early authorities of the Naiyāyika school 'Trilocana's' doctrine of two kinās of perception—perception without qualifications (nirvikalpaka) and perception with qualifications (savikalpaka). He interprets the sūtra as mentioning both kinds—nirvikalpaka in the word avyapade\$ya, and savikalpaka in the word vyavasāyātmaka. The doctrine however is later, and seems to have arisen in answer to the Buddhist view of perception as kalpanāpodha, i.e. the bare impression of sense divested of all additions made by the understanding. That this Bauddha interpretation of avyapade\$ya &s kalpanāpodha is a not unnatural interpretation is evidenced by Dr. Jhā footnote to p. 115 of vol. I of his translation, where he says '' it would seem that the Bauddha definition of perception as kalpanāpodham abhrāntam were a true rendering of Vātsyāyana's view ''. But it seems to me that Vātsyāyana's view (which I believe represents the probable meaning of the sūtra) is different both from the Bauddha view and from Vācaspati's.

conclusion which Vātsyāyana rejects, and which, as he thinks, the sūtrakāra intended to reject by the insertion of the word avyapadeśyam in his definition of perception. This conclusion is stated in the words: nāmadheyaśabdena vyapadiśyamānam sat śābdam prasajyate—" the perception, being expressed by a word which is the name of the object, turns out to be an affair of words—verbal".

The difficulty is to see just how this conclusion is justified by these premises: a difficulty due to the fact that we do not know the precise nature of the doctrine which

Vātsyāyana here criticises¹.

In what sense can it be held that the perception is 'rerbal' on the ground that you can only express it (ryapadis—)² by using the word which is the name of

the object perceived?

—The position seems intelligible. As expounded by Vātsyāyana, it starts out from the assertion that wherever there is a distinct thing, there is a distinct word for it—yāvad artham vai nāmadheyaṣabdāḥ—: and the implication of this is that if there is a supposedly distinct thing which has no distinct name, then it is not after all a distinct thing. Now cognition, as such, comes under this description, for it has no name other than the name of the object of which it is the cognition. Therefore it is nothing distinct from the object,—or, if it can be at all distinguished, then thoughts are just the names themselves as distinguished from the things. There are things: and there are names of things: but there is nothing else,—no third distinct entity 'cognition'.

Vātsyāyana replies that the distinct status of the apprehension as such is shown by the fact that there is apprehension of the object *before* the union of word and

¹Vācaspati appears to connect it with the philosophical grammarians, and quotes in this connection two passages from Bhartrhari's Vākyapadīya, I. 124 and I. 126 (NVI p. 83; and the editor's list of identified quotations, to which I owe these references).

²Cf. avyapadeśya in NS T. i. 4. Sec next note.

^{*}This suggests J. B. Watson's 'behaviorist' psychology.

thing has come into play (anupayukte śabdārthasamban-dhe): and even after the naming has taken place the same remains true—the cognition remains distinct from the names. This is what the sūtrakāra asserts by the word avyapadeśya,—i.e. distinct from names¹. When it is necessary to speak of the cognitions as such—as it is for practical convenience (vyarahāra)—we can of course indicate what particular cognition we refer to: the 'indication' (vyapadeśa) being made by the name of the object followed (in Sanskrit) by the particle iti. The idea is not the object: but it can be indicated as being of the object.

SECTION 6. PERCEPTION AND DOUBT

Vātsyāyana interprets the word vyavasāyātmaka in the definition of perception as excluding the case of doubtful apprehensions. "Since a man, seeing an object from a distance, is not sure whether it is smoke or dust, and the uncertain cognition of the object which he has in the form 'this is either smoke or dust', is 'produced by the contact of organ and object (indriyārthasaninikarsotpanna), it should be included under the head of perception.—It is with reference to this possible wrong view that the word vyavasāyātmaka, 'amounting to conviction', is inserted in the definition'. Nor can it be said that it is the 'mind' (manas) alone that is concerned in such doubtful apprehensions, and that they do not therefore arise from the sense-contact. "For it is on having

¹Jacobi JAOS xxxi, p. 20, footnote, renders the terms by 'not intimately connected with words', which is as close a rendering as is feasible. But I think he is mistaken in saying that its meaning is more accurately expressed in Dinnāga's definition of pratyaksa by kalpanāpodha: for this implies the equation avyapadešya=nirvikalpaka, which seems to me later. Cp. PBh. p. 187 II. 18-19. Prašastapāda paraphrases NS I. i. 4 in this passage, and repeats the word avyapadešya in his paraphrase. See p. 118, n. 2.

^{2&#}x27; mind ' is a symbol for ' manas ' not a translation.

actual visual impression of the object that the man has the uncertain apprehension (na avadhārayati) of it. Just as in true perception it is something grasped by sense that is grasped by 'mind', so (in the case of uncertain apprehension) it is because he has failed to have certain apprehension with the senses that he fails to have certain apprehension with the 'mind'. And this failure to have certain cognition with the 'mind', which is conditioned by the failure of the senses to give certain apprehension, being a state of mere hesitation (vimarśamātram) with reference to the precise character of the object (viśeṣāpekṣam) - constitutes doubt (samśaya); which does not arise previously to contact of sense with the object. In every case of true perception there is a determination or conviction (ryarasāya) of the knower which comes through the sense-organ, as is shown by the fact that, where the sense-organ is injured, no reflective consciousness of such determinate cognition (anuvyavasāya)1 arises ''

^{&#}x27;vyavasāya and anuvyavasāya seem to be used here in the technical sense common in the later school, the former being the cognition itself—ghata'yam, this is a pot—, the latter being the awareness of the cognition—ghatam aham jānāmi, I apprehend the pot.

the blind man could not have awareness of perception of colour—rūpam aham jānāmi—because he lacks the organ for the perception of colour. Similarly he could not even have a doubtful apprehension of the colour of a thing; nor could he be aware of any such doubtful apprehension. (There is no reason perhaps why anuvyavasāya should not be applied to awareness of a doubtful apprehension. But as Vātṣyāyana confines vyavasāya to cognitions from which doubt is excluded, it seems that he would naturally confine annvyavasāya to the awareness of such [i.e. certain] cognitions only.)

The exclusion of doubt from perception is in line with the exclusion of error from perception. The motive is to make perception a 'pramāna' = pramākaraṇa. The thought is that knowledge, if it is knowledge, excludes error and doubt: and this applies to perceptional as to inferential knowledge. A fallacious reason is not a reason, but only an appearance of reason (hetvābhāsa). So an erroneous apprehension by sense is not a perception, but only an apparent perception: and some logicians accordingly use the term pratyaksābhāsa to designate erroneous apprehensions of sense.

SECTION 7. THE 'CONTACT' IN PERCEPTION

Perception is defined in the Nyāya Sūtra as arising from contact between object and sense-organ. vana points out two difficulties involved in this part of the definition. One is that the 'perception' of the 'qualities' of the soul' (i.e. of cognition, pleasure and pain, and so on), might appear to be excluded from perception, since there would seem to be no sense-organ at work here. He replies that 'mind' (manas), the contact of which with soul is the condition of all perception including perception of one's own states, is a sense-organ. But, the opponent objects, it is not included in the enumeration of the sense-organs (indriya) given in Nyāya Sūtra I. i. 12, viz., smell, taste, sight, touch, and hearing.—The answer is that that enumeration is an enumeration of those organs only which (i) are composed of the material elements—bhaulikāni indriyāni, (ii) are each confined to a special class of objects-niyatavisayāni, (iii) are organs of perception only so far as they are themselves endowed with the qualities which they apprehend'. Mind', on the other hand, is not composed of any substance-stuff, has all things for its objects, and does not operate as an organ through being endowed with the

The principle of like grasping like underlies this primitive psychology or physiology of the sense-organs. The hearing-organ grasps sound because it is made of 'ether', and sound is the peculiar property of ether: the organ of smell is made of earth-substance, of which odour is the peculiar property: the taste-organ is made of water, of which sapidity is the proprium: the visual-organ, of light-substance, tejas: the tactile-organ, of air, to which the quality of touch is proper. Earth, water, fire, air, ether are the five material substances (panca-bhūtāni). See NS I. i. 12—14. To these five bhūta's or 'stufts' four other 'substances' are added—space, time, the soul, and the mind or inner organ—to make up the Nine Substances which the Vnišesikas recognised, as mentioned in VS I. i. 8.

In short, it marks the point at which the 'like grasps like' theory of perception goes bankrupt. Mind which grasps conscious states is itself not endowed with consciousness. See PBh. p. 89 l. 18.

qualities which it apprehends. And though not enumerated among the sense-organs in I. i. 12, it is separately mentioned in I. i. 16, where it is argued that it must exist since otherwise simultaneous cognitions would be possible, as in fact they are not possible. And that it is a sense-organ is to be learned from another philosophical system,—according to the accepted methodological principle, that 'a view of others which is not rejected is accepted.

The other difficulty raised by Vātsyāyana is that the definition only mentions the conjunction of organ with object, and fails to mention the conjunction of soul with internal organ and of internal organ with external senseorgan which are essential factors in the 'contact' from which perception arises.—The answer given is that this

The argument from non-simultaneity of cognitions and volitions is used in VS III. ii. 3 to prove that there is only one 'n.ind' in each body: and similarly in NS III ii. 59. VS VII. i. 23 teaches that manas is stomic,—

not all-pervading like the soul: similarly NS III. ii. 62.

The Vaisesika Sūtra. See preceding note for the similarity of the two systems in their doctrine of manas. But I find no explicit statement in VS, any more than in NS, that manas is a sense-organ. The motive for calling manas a sense-organ no doubt is that both systems class psychical processes and states among the 'qualities': and a sense-organ is required for the perception of these 'qualities'. Vātsyāyana and Prasastapada both call manas a sense-organ. But see below pages 364-5.

*tantrayukti. See Vidyābhūṣaṇa HIL p. 24.

*paramatam apratisiddham anumatam. 'anumata' is the name given to one of the tantrayukti's both in Kautilya's and in Susruta's lists: and it

is defined by them in exactly the words here used by Vatsyayana.

[&]quot;VS III. ii. 1 argues that manas exists on the rather different ground that when there is contact of object, organ, and soul, knowledge sometimes arises but sometimes does not,—which implies a fourth factor. In both arguments manas stands for 'attention'.

Dinnaga in his Pramāṇasamuccaya ridiculed Vātsyāyana's use of the principle in this passage, justly remarking that if acceptance of doctrines follows from not rejecting them the other sense-organs need not have been mentioned in the Nyāya Sūtra (seeing that the Vaikeṣika Sūtra mentions them):—anisodhād upāttam ved, anyendriyarutam vrthā (quoted in N_eVT, p. 97 l. 1. 28. In the line cited on the same page l. 1—a line which forms the first half of the same couplet, as appears from HIL p. 280 footnote—Dinnāga seems to point out that the admission of manas to the status of organ of perception is in fact implied in classing psychical states such as pleasure and pain among the objects of cognition:—na sukhādi prameyam vā, manarāstīndriyāntaram. His point against the sūtra apparently is that it ought to have classed manas as an organ but failed to do so. "Either psychical states are not objects, or else mind is an additional organ").

sūtra is not a formal statement of the full conditions of perception (etāvat pratyakse kāranam iti), but only of the special conditions (viśistakāranavacanam): the confunction of soul with internal organ is a condition common to perception and other forms of knowledge such as inference: as for the conjunction of the internal organ with the external organs, which is peculiar to perception, bhidyamānasya pratyaksajñānasya nāyam bhidyata iti samānatvān nokta iti—that is, "it is not mentioned because it is not different in the different varieties of perceptual cognition, but is alike in them all": which presumably means that it may be taken as implied in the mention of contact of sense and object. The explanation is however so clearly inadequate that efforts have been made by the commentators to get some other meaning out of the sentence'. The truth seems to be that the sūtra had not yet systematised its doctrine of samnikarsa to the extent of explicitly recognising (what is implied in its position) that manas must form one of four factors in the 'contact'2. Nor was the position one which it was easy to make explicit without raising serious difficulties. For manas then tends to combine two quite different functions: (i) as the organ of attention which prevents the knower from having more than one cognition at one time; (ii) its the organ through which the knower apprehends one particular class of objects, viz., his own psychical states.

¹See Vārtika ad loc. Gangānātha Jhā follows one of these alternative explanations in his translation.

²It is noteworthy that VS III. i. 18 omits manas in its enumeration of the factors of the 'contact' from which external perception arises, just as NS I. i. 4 does. It is incredible that the omission should be, so to ay, accidental in both cases. I think therefore that the explicit notion of a catustaya of factors comes after the sūtra-period; though already present in Yūtsyāyana and Praśastapāda. Vidyābhūṣaṇa says that Dinnāga in quoting FS III. i. 18 inserts manas into the formula (HII₄ p. 279 n.). Did he insert it as representing the doctrine of the Vaišesika school of his day?

⁽The occurrence of manas in VS, V. ii. 13 proves nothing, since that <u>utra</u> is defining the apprehension of pleasure and pain, in which manas is encorned in its special inner-sense function).

And yet it is difficult to differentiate the two functions: and if we insert manas as a fourth factor into the formula of VS III. i. 18 atmendriyārthasamnikarsād yan nispadyate (which appears to be the formula for the contact which conditions external perception, i.e. identical with I.i. 4), it will become the same as the formula of VS. V.ii.15 atmendriyamanorthasamnikarṣāt sukhaduhkhe (which is the formula for the contact which conditions 'inner-sense' awareness of psychical states).— There was therefore a motive for omitting or slurring over the factor of manas in 'external perception'. But when, in opposition to the view that ideas are self-conscious (samvedya)¹, the Nyāya-Vaišeṣika school elaborated its doctrine of the perceptibility by the internal organ (mānasapratyaksatā) of cognitions and when at the same time the internal organ (i.e. attention) was insisted on as a factor in external perception, an incompatibility between the two functions attributed to manas (as a factor of attention in external perception, and as the "organ" of internal perception) becomes obvious. The Naiyāyika held that the cognition 'this is a jar' (vyavasāya) is different from, and can exist in independence of, the reflective consciousness 'I have knowledge of this jar' (anuvyavasāya). The latter was called in the later school mānasapratyakṣa, perception by the internal organ: the

For 'the Nyāya-Vaišesika polemic against this view see NK pp. 90—92 (translated by Faddegon pp. 403—406). See also NK pp. 96-97 (Faddegon, pp. 406—409) for criticism of the $M\bar{\nu}m\bar{\nu}m\bar{\nu}saka$ view that thought is inferred from the 'known-ness' ($j\bar{\nu}atat\bar{u}$) of things.

For the difference between the Bauddha view of cognition as sanivedya and the Mimāmsakh view of it as svaprakāśa, see Jhū PSPM pp. 26–28. The Bauddha meant by sanivedya that the cognition can be its own object (karma). Prabhākara replies that we are aware of our cognitions as subjective processes but not as objects—sanivitayaiva hi sanivit sanivedyā, na sanivedyatayā (quoted PSPM p. 26). Therefore, if we are to call cognitions sanivedya we must be careful not to understand sanivedya in the sense of prameya, i.e., object of cognition. For cognition is never the object of direct apprehension. It is however the object (prameya) of inference: we can infer that cognition exists—but that does not mean that it is ever an object of direct apprehension.

former is bahyendriyapratyakṣa, perception by external organs.*

SECTION 8. TWO MOMENTS IN PERCEPTION AND VARIOUS MODES OF 'CONTACT'. PRASASTAPADA'S DOCTRINE

Up to this point in the exposition it has not been necessary to go beyond the doctrine of the Nyāya Sūtra as expounded by Vatsyayana. The commentaries of Uddyotakara and Vācaspati Miśra have been ignored, for the reason that they presuppose a development in the doctrine of perception of which there seems to be no trace in the Nyāyabhāsya. This development in dectrine consists in a twofold progress in analysis: first, of the object (artha), which was seen to present a complexity hardly suspected at first; and secondly of the contact (samnikarsa), which will have to take on colours corresponding to various aspects of the object, if it is to be maintained that the object is equally an object of perception in all aspects. It may well be that the categories of the Vaisesika system supplied the necessary instrument of analysis¹: and it is in a Vaisesika work, the

^{*}Although Vātsyayāna finds himself compelled in this passage to admit that manas is the indriya in self-consciousness he never developed explicitly the doctrine of mānasa-pratyakṣa, and regularly uses the phraseology of sanwedya and sanwit. But his admission here, emphasised by Dinnāga, became the source of the doctrine of 'inner sense'.

Dinnāga, as often, hits the mark in his criticism. He says that the Naiyāyika borrows his definition of perception from the Vaišeṣika, but fails to connect perception with generality, particularity, substance, quality, and action, on which the Vaišeṣika's intercourse (i.e. sainnikarṣa, 'contact') is dependent'. (Vidyābhūṣaṇa, HIL p. 279). The order in which the five are stated is strongly suggestive of the mention of these five as 'višeṣaṇas' or qualifications of the percept by Praśastapāda. The view commonly accepted that Praśastapāda owes what is distinctive in his logical doctrine to Dinnāga. But there is evidence that the contrary is the case, and that Dinnāga found already developed in the Vaišeṣika school (whether by Praśastapāda or by some predecessor of Praśastapāda) some at least of the doctrines which Praśastapāda is supposed to have borrowed from him. If for instance his reference here is to the five 'višeṣaṇa's' of Praśastapāda, it follows that Buddhist logic owes its five 'kalpaṇā's (which are equivalent to the 'išeṣana's) to the Vaišeṣika school. A further piece of evidence pointing in

Bhāṣya of Praśastapāda, that the earliest statement is to be found of the two doctrines which subsequently became fundamental in the Naiyāyika theory of perception. The section on perception in Praśastapāda's Bhāṣya forms in fact the basic text for this phase of the doctrine of perception.

the same direction is to be found in H1L, ibid., where Dinnāga is stated to quote an explanation of the Vaisesika Sūtra on perception,—the explanation corresponding closely with Prasastapāda's words. Again, Dinnāga's attack on the doctrine of the universal $(s\bar{a}m\bar{a}nya)$ cited in the SDS (Chapter on Banddhas = p. 21 of Cewell and Grugh's trans.) is directed against teaching identical with that found in Prasastapāda (these lines are assigned to Dinnāga by Vidyābhūṣaṇa, on the authority of the Jaina logician Dharmabhūṣaṇa; but Vidyābhūṣaṇa does not identify them. H1L pp. 273—4, note 7. The SDS quotes three couplets, and cites Prasastapāda in the context).

The doctrine of savikalpaka and nirvikalpaka (really traceable to Frasastapāda) is attributed by Vācaspati Misra to Tribocana (NVT pf. 87. Trilocanagurūnnītamārgānugamanonmukhaiļi). asmābhih Trilocana is twice referred to in the Tarkikaraksa (pp. 337, 356, according to the TR editor's list of authors cited). Gopināth Kavirāj in his introduction to Jha's translation of the Nyāya (p. 15) says: "Udayana informs us that in the work of restoration of Uddyotakara's text Vācaspati was indebted to (his teacher or vidyāguru as Vardhamāna says) Trilocana". See NVTP (Bibl. Ind.) p. 9-What Udayana says here is that Vācaspati Claims to have infused fresh life into the antiquated doctrines of Uddyotakara by means of the clixir of instruction got from the teacher Trilocana (Trilocanagurolsakāšād upadešarasāyanam āsāditam amūsam punar navībhāvāya dīyate.— Amūsām refers to the atijaratīnām Uddyotakaragavīnām of Vācaspati's introductory stanza to NVT, on which Udayana is here commenting). It is quited clear that, whoever this Trilocana may have been, both Udayana and Vacaspati regard him as having effected something of a revolution in the teaching of the school. It seems to me that he really stands for the introduction of Praśastapāda's teaching into the Nyāya.

Vidyābhīṣaṇa H1L p. 134 notes that Trilocana is criticised by Ratna kīrti (Six Buddhist Nyāya Tracts pp. 12 and 58), and that a poem Pārthavijaya is attributed to one Trilocana by Rājašekhara in Sūktimuktūvali. H1L p. 369 footnote states that the commentary on the Nyāyasāra attributes to Trilocana an eightfold division of Fallacies of the Example. (Prašastapāda gives a twelvefold division PBh. p. 247—v. infra. p. 221). It might be conjectured from the order of the authors criticised in the Apohasiddhi that Trilocana's date falls between that of Kumārila and that of the Nyāyabhūṣāṇa. See Haraprasād Śāstri's introduction to Six Buddhist Nyāya Tracts, pp. iii. In the other tract by Ratnakīrti—the Kṣanabhaṅgasiddhi—the order of authors criticised is Sankara, Trilocana, Nyāyabhūṣaṇa, Vācaspati: (see pp. 58 and 70 for Trilocana). Trilocana, Nyāyabhūṣaṇa, Vācaspati: (see pp. 58 and 70 for Trilocana). Trilocana's date may be about 800. The doctrine of nirvikalpaka and savikalpaka is already found fully developed, and the terms already used (see Sl. Vārt., pratyakṣasūtra, lines 86 and 89), in the solokarārtika of Kumārila, whose date is perhaps 700—750. So that Trilocana cannot be the originator either of the doctrine or of the phraseology.

Translation of Prasastapāda's account of perception.

"Perception is called pratyakṣa because it arises in relation to this or that sense (akṣam akṣam prati). These 'akṣas' or sense-organs are six, namely: smell; taste, sight, touch, hearing, and the internal organ (manas).

(i) Perception of Substances

"Now perception arises in respect of substance and the other categories. Substance being of two kinds, there is perception of substances which have non-atomic magnitude, provided that they possess parts, and show manifest colour, such perception arising from a contact involving four factors,—provided that there

That both Kumārila and Vācaspati Miśra were aware that the doctrine of nirvikalpakajñāna derives from Praśastapāda (or from a doctrine similar to his) is perhaps indicated by the fact that they both use Praśastapāda's term ālocana in connection with nirvikalpakajñāna. See Sl. Vārt., pratyakṣasūtra, 1. 71 (viśesane tu bodhavye yadālocanamātrakam), and NVT p. 83 l. 13 (ālocanajñānāvarodhārthenāvyapadešyapadena- the word avyapadešya [in NS I. l. 4] has the force of including intuitive apprehension).

¹FBh. pp. 186—188. The passage presents serious difficulties. Faddegon gives an analysis of the passage (at p. 294), but does not translate it: he translates the polemical parts of Srīdhara's comment at p. 442. See also Gangānātha Jhā's translation in the Pandit.

The textual reading is: mahaty anekadravyavattvodbhūtarūpaprakūsacatustayasamnikarṣūd: This gives no sense, and must be corrupt. But there is no doubt as to the meaning. (i) Atomic substances (manas, and the atoms of earth, air, fire, and water) are imperceptible. Earth-composites, fire-composites, and water-composites are perceptible. (ii) Substances which, although of more than atomic size, are not composites are imperceptible (space, time, ether, and the soul). (iii) A substance which satisfies these two conditions is air. But this also is imperceptible in virtue of the curious third condition: for it has not 'manifest colour': and the Vaišeṣikas hold that a substance does not become perceptible in virtue merely of the perceptibility of the quality which forms its peculiar property (in the case of air, touch)—unless at the same time it possesses udbhūtarūpa 'manifest form or colour'.

³The four factors are object, external organ, mind, and soul ('mind' is a misleading rendering of manas, in spite of etymological identity. But the alternative rendering 'internal organ' suggests the function of manas as organ-of inner sense. In the present context manas has its other meaning = the organ of attention).

is also present the totality of conditions constituted by 'merit' and so forth¹.

Two moments in Perception—(i) intuition of svarūpa, (ii) perception of subjects as possessing qualifications.

"Perception is (at first) bare intuition of unrelated things². (But) from a contact of mind and soul which

It is difficult to determine the application of the fourfold contact spoken of in this sentence. It seems to be stated as a general condition applying to all cases of perception,—and yet l'raéastapāda goes on to say that in some classes of perception only two or three factors are involved in the contact. The probable explanation is that the set of four factors, object, organ, soul, and 'mind represents the norm to which the contact ordinarily conforms: there must be a knower, a thing, an organ of sense, and attentive consciousness. But in certain cases there is a departure from this norm? for (i) in internal perception of the soul's own states there can be no contact between knower and thing, because the thing is the knower himself: and the 'organ of sense' is simply attentive consciousness to one's own states, so that there is no question of contact between manas and indriga here: and (ii) in the perception of sound there can be no contact between organ and thing in which the sound perceived resides, because the sound resides in the organ itself.

'Srīdhara explains by dharmādharmadikkūlādi--' merit, demerit, space, time, etc.'. Merit and demerit, as adṛṣṭa, constitute a man's ' fate ', and are the universal condition of experience as such.

²This is the crucial passage. I adopt the variant svarūpūlocanamātram pratyakṣam in place of the single word svarūpalocanamātram "(without pratyakṣam) of the text. The text puts a fullstop after svarūpūlocanamātram, and no stop before it, connecting it with the preceding sentence.

Where does this doctrine of bare intuition come from? What are its objects? What precisely is the meaning of srarūpa?—Praśastapāda himself gives us a chie later on in the section (p. 187 lf. 13—17) where he says sāmānyavisesesu svarūpālocanamātram rratyaksam pramānam, prameyā dravyādayah padārthāh. This gives an answer to the question—what are the objects of the 'intuition'? (In the light of this passage, I am inclined to suggest that the words sāmānyavišesesu have fallen out in the present sentence after the word srarūpālocanamātram, the omission being due to the similar phrase immediately following, viz., sāmānyavišesadravya—etc. This would explain the variant reading which adds pratyaksam: for the sentence'is reduced, by the omission, to the single word—svarūpālocanamātram; so that it became necessary either to attach this to the preceding sentence or else to fill up the structure with some addition. NK p. 189 l. 19 ff. supports this emendation).

As to the meaning of svarūpa: the term implies nothing about the character of the objects intuited, but merely means that the object, whatever it be, is intuited 'in itself', i.e. not as related in any way to anything else. Svarupūlocana corresponds to the 'simple apprehension' of our schools

bears on the five qualifications (viśeṣaṇa), namely, genus, species, substance, quality, and movement, there arises perception in the forms¹—

The Five Predicables

- (1) this substance exists
- (2) this substance is carth-substance
- (3) the cow has horns
- (4) the cow is white
- (5) the cow goes.

logic as opposed to the $vi\acute{s}esan\~apeks\~a$, relation to qualifications, which constitutes the 'judgment'.

As to the source of this doctrine of the svarūpālocanamātra, bare intuition of essences, it is possible that the view of perception as contact with a bare 'that' (svalakṣaṇa) was already current: the consequence being that all qualifications (riseṣaṇa) of the 'that' are no longer given in perception, but mere figments of imagination (kalpanā).

Prasastapāda may be replying to such a view in his doctrine that perception implies, as one moment in it, an intuition of the as yet unrelated characters $(svar\bar{n}pa)$, which can thus be factors in the perceptual judgment without incurring the condemnation of being imaginative fictions. The visesana's are not mere $kalpan\bar{a}$'s because their $svar\bar{n}pa$ has been given in the ' $\bar{a}locana$ ' moment of perception.

The view in opposition to which Praśastapāda would then be putting forward this doctrine is that formulated in Dinuāga's definition of perception as kalpanāpodha. Praśastapāda interprets the word avyapadcśyam of the Nyāya Sātra—not in the sense in which Vātsyāyana interprets it—but as meaning that perception gives, prior to naming (vyapadcśa) and other relating activities, the characters which are then named and referred to a subject as predicates. The opposition (Banddha) view is that avyapadcśya meant that perception is contact, not with svarāpa's capable of becoming višesana's but with a svalaksana which was incapable of becoming višesana's but with a svalaksana which was incapable of becoming a predicable: all the predicables being in fact fictions.

This might seem to support the view that Praśastapāda followed Dinnāga, and that his višesaņa's are simply Dinnāga's kalpanā's recast from a different angle of vision. For it seems probable that Praśastapāda's position implies antecedents of which no trace is to be found in Vātsyāvana. And we find in Dinnāga antecedents which make the view of Praśastapāda intelligible. But the evidence that Dinnāga was acquainted with views like Praśastapāda's (referred to in the note above, p. 105) seems to me strong.

, 'The five ' $kalpan\bar{a}$'s' as stated by Vācaspati Miśra are not quite the same. See NVT p. 102 l. 2 where they are given as name, class, quality,

- (ii) Perception of Qualities. (a) Special qualities other than sound. (4 factors).
- "Perception of colour, taste, smell, and touch has as its cause an organ specially appropriated to the particular quality perceived (niyatendriyanimittam), and arises from a contact of the organ with the thing in which the quality resides $(sv\bar{a}\acute{s}rayasamnikar\dot{s}at)^1$, as the result of the inherence of the quality in many parts $(anckadravyasamav\bar{a}y\bar{a}t)^2$, and of the distinctive character belonging to the quality concerned $(svagatavi\acute{s}e\dot{s}at)^3$.

act, substance. e.g. It is Dittha: it is a cow: it is white: he is a cook: he has a stick.—Vidyābhūṣaṇa (HIL p. 129 last line of footnotes) says that "the idea of genus (jāti), quality (guna), action (kriyā), and name (nāma) was derived from the Mahābhāsua of Patañjali". It seems likely that the notion was originally derived from the grammarian's classification of words. Dinnāga's argument appears to have been that words can never express the unique character which belongs to perception—the object of which is svalaksana, sui generis: whereas words by their very nature as conventions for communication can only deal with common characters (sāmānyalakṣaṇa). To say that perception is apprehension stripped of words (avyapadesya) is to say that it is apprehension stripped of all the (illusory) common characters which the different kinds of words impose upon it: that is, it amounts to saying that perception is apprehension kalpanāpodha. Perception is of the thing in its uniqueness (svarūpatah),-and the svarūpa, the thing in its uniqueness, is necessarily avyapadesya, inexpressible. That means that nothing can truly be predicated of it. All predicables are fictions imposed upon reality. They are not genuine qualifications (viscoana) of the real. See H1L p. 277 for an account of Dinnaga's attitude.

The samyuktasamavāya of later terminology. The red thing is related by conjunction (samyoya) to the visual organ, and the quality—red—is in the thing by relation of inherence (sāmavāya). Therefore the relation of red to the visual organ is inherence-in-the-conjunct.

 2NK p. 194 l. 4 anekeşv avayaveşu samavetanı dravyam anekadravyam tatra samaväyät. The quality of a single atom would not be perceptible.

³Ibid. svagato višeso rūpe rūpatvam, rase rasatvam, etc.,—tasmāt. I have followed this. But it would give better sense to interpret "as a result of the special property with which the organ is endowed".—It would be awkward to refer sva- in svagata to the organ when sva- in svāśraya refers to the quality perceived: but svagata may be taken as a unit-word = proprius:—so that this difficulty will not arise.

(b) Sound

(3 factors)

"The perception of sound arises from a contact which involves only three factors (trayasamnikarṣāt), for sound resides in the organ of hearing itself and is apprehended through the organ alone (tenaiva).

(c) Attributes perceptible by sight and touch

(4 factors)

"Number, extension, separateness, conjunction and disjunction, nearness and farness, viscidity, fluidity, impulse (vega), and movement are grasped by sight and touch, as the result of inherence in perceptible substances.

(d) Psychical states (2 factors)

"Cognitions, pleasure and pain, desire and aversion, and volition, are apprehended as the result of a conjunc-

The three factors are soul, manas, and organ of hearing. The artha, or thing (other than the sense-organ) in which the quality perceived resides, disappears, because there is no contact (sainyoga) between the portion of ether enclosed in the ear-channel (which constitutes the organ of hearing) and that portion of ether which is in immediate contact with the resonant body: so that this cannot be a case of sainyuktasamavāya, 'inherence-in-the-conjunct'. It is therefore described, in the later phraseology of the doctrine of Six Contacts, under the rubric, of samavāya—simple inherence of the quality perceived in the perceiving organ. We do not hear the original sound (ādyaśabda) at all. Sound propagates itself in the ether as a succession of sounds, which may be imagined as resembling either wave-undulation (rīcitaraiga) or Kadamba-buds (kadambamukula): the initial sound is produced by conjunction or disjunction of bodies (vibhāga-, sainyogajaśabda). while the intervening sounds and the final sound (madhyama and antyaśabda) are produced by the immediately preceding sound (śabdajaśabda). The final sound is that inherent in the portion of ether which forms the organ of hearing: and it is this that we hear. (See Tarkabhāsa pp. 136—138, with p. 31). In this sense then there is no 'object' or artha: and so Prafastapāda says there are only three, instead of four, factors in the sainiharaya.

^{· 2}Without the aid of a (conjunct) object. See last note.

These are what we should call—in Locke's terminology—primary qualities. But they are not all 'qualities' (guna) on the Indian view: for the last one, movement, belongs to the category so-named (karma).

tion (samyoga) of two factors internal organ and soul.

(iii) Perception of Universals

"The universals 'being', 'substancehood', 'qualityness', 'the character of being motion' and other universals, which reside by inherence in perceptible substrates, are apprehended by the organs which apprehended the substrates (upalabhyādhārasamavetānām āśrayagrahakair indriyair grahaṇam)².

The later rubric for this form of contact is samyuktasamavāya, inherence in the conjoined (the psychical 'qualities' being inherent in the soul, and the soul being in conjunction with the internal organ). So that the rubric for inner sense perception is identical with the rubric for the external sense perception of qualities (other than sound) and of movement. This is obviously objectionable: and Prasastapāda's classification by the number of factors involved in the 'contact' has at least this advantage over the later classification, that it makes inner-sense perception very different from any form of external perception.

But of course neither view is clear. In the first place the function played by mind is ambiguous, both functions—that of organ of sense, and that of organ of attention—being confused or identified. In the second place there is a confusion as to the part played by soil in the 'contact'. Is it 'conjoined' as subject of the knowledge, or as substratum of the qualities which form the object of the knowledge? or both at once? Prasastapāda's assertion that there are only two factors in this samnikarsa implies a double identification (1) of manas with indriya, and (ii) of ātma and artha. That is (a) the soul, as knower, comes in contact with (b) the mind as organ of attention: and (c) the mind as organ of sense comes in contact with (d) the soul (as the substrate in which are inherent the psychical qualities which form the thing known). But (b) = (c) and (a) = (d). Therefore only two 'factors' are 'involved'! This marks the bankruptcy of the contact-theory when applied to self-awareness.

²Two rubrics are given for the perception of universals in the Tarkabhāṣā, viz., (a) samyuktasamavetasamuvāya inherence in what inheres in the conjoined. The pot is conjoined with the eye: colour inheres in the pot: and the universal colour inheres in the quality colour. But a different rubric is needed to cover the perception of the universal sound (śabdatva), (b) samavetasamavāya: for the universal sound inheres in the quality sound, which again inheres in the organ of hearing. (c) There is yet a third case, that of perceiving the substanceness of substance: but this comes under the rubric samyuktasamavāya (the rubric applicable to the perception of quality and unovenent): for substanceness inheres in a substance, and a substance is (when perceived) in conjunction with the organ of sense. (The Tarkabhāṣā does not menţion this case).

This account of the perception of the universal as a distinct form of perception, together with the notion of a universal as something which inheres in substance, quality, and action or movement, implies an ultrarealistic mode of thought.

Such is perception in the case of ourselves and beings like us¹."

Nate on the Perception of Movement

Śrīdhara polemises against an opponent who admits the reality of movement but denies its perceptibility, holding that it is inferred from disjunctions and conjunctions. Srīdhara retorts that, if this were the case, we ought to infer (when we see a monkey jumping about in a tree) that the tree is moving as well as the monkey, since the conjunctions and disjunctions inhere as much in the tree as in the monkey. The opponent answers that the monkey alters its position in space as well as in the tree; and movement on the part of the tree will not explain the former set of disjunctions and conjunctions. Sridhara retorts that we may suppose the monkey to move in order to explain his change of position in space: but this does not prevent us supposing the tree to move in order to explain the monkey's change of position relatively to the tree. And the opponent must make the latter supposition, if he is in earnest with his principle of inference, which is that the cause (movement) resides in that in which the effect (conjunction and disjunction) resides (yadadhikaranam kāryam, tadadhikaranam kāranam). The opponent answers that the supposition of movement on the part of the monkey explains both sets of positional changes at once (both relatively to space, and relatively to the tree), and that therefore there is no need to suppose movement on the part of the tree. Srīdhara retorts that a man may be free to act or not to act, as suits his convenience: but the mind is unlike the man in this respect—it is not free to apply or not to apply its own principles of inference at will (na cedam purusa iva cetanam yatprayojanānurodhād pravartate). When

¹This closes Prasastapāda's account of the varieties of normal perception, which thus omits the sixth mode of contact recognised by Uddyotakara and all subsequent schoolmen—namely, viseṣaṇaviseṣyabhāva.

certain conditions are present the conclusion follows, when the inferential mark (middle term) is found to be related to a thing, it must establish that thing. The conclusion cannot be over-ridden by the fact that the result might be otherwise explained, as is the case with a Presumption or Implication (arthāpatti)¹. The opponent then shifts his position, saying that it is only changes of position in space (not relatively to this or that object) which proves movement (kriyānumitihetu). Sridhara replies that conjunctions and disjunctions with imperceptible points in space are imperceptible: and if the opponent corrects himself further by suggesting that movement is inferred from the series of contacts with points on the surface of the terrestrial globe (bhūqolaka), then he will find it difficult to explain our apprehension of. the movement of a bird flying in mid-air. Perhaps he will suggest that the middle term here is the continuous series of conjunctions of the bird with the multitude of rays² spread out through space: but then he will not be able to account for the tactual perception of unseen and involuntary movements of the limbs or parts of the body in the dark; nor for the perception of movement in an instantaneous flash of lightning on a night when everything is obscured in great clouds.

(The passage is at NK p. 194 1. 13—p. 195 1. 6, and is translated by Faddegon p. 450, who however partially misuhderstands the argument.—Psychology nowadays admits that the appearance of motion is a speci-

"viyadvitatālokanivāharibhāgasamuogapravāha. Faddegon renders "the series of conjunctions and disjunctions with the multitude of light-beams expanded in physical space". The difficulty suggests itself that the 'dight beams' are not perceptible ordinarily.

This is an unanswerable argumentum ad hominem. The opponent says that the monkey's movement is known by anumāna—which means demonstrative proof. But the very premises which are supposed to 'demonstrate' that the monkey moves, would also 'demonstrate' that the tree moves: and the opponent is not free to refuse to draw a conclusion which is 'demonstrated' by his premises. For the conclusion of a denionstration is not like a hypothesis, the force of which depends on its being the only supposition available.

fic form of sense-experience; nor have the attempts to explain it in terms of muscular and articular sensations and local signs met much success. It is however a form of perception which is particularly prone to illusion: nor would it be easy to determine the conditions under which it could claim to be a pramāṇa, as the instrument of a cognition which is avyabhicāri. Probably the opponent had this in view when he asserted that movement is known inferentially. But Śrīdhara rightly suggests that unaided inference would point to mere relativity.—His argument would have been more interesting had it been directed against a relativist: but the opponent maintains an impossible position in asserting at once that movement is real, and yet not given in perception.)

The Perception of Yogins.

(a) in the ecstatic condition.

"In the case of Yogins, who are different from us,—if they are in the condition called 'yukta', the internal organ, favoured by the qualities resulting from yoga, gives them unerroneous intuition of the essence (avitatham svarūpadarśanam) of their own souls, of souls other than their own of 'ether', of space, of time, of atoms, of air, and of the internal organ',—also of qualities, movements, universals, and differences

'It will be seen that this supernatural perception of the yuktayogin (the perception of the viyuktayogin is merely supernormal) fills an inconvenient gap in the Vaisesika theory of knowledge. For it provides for the perception of the (for us) imperceptible category inherence and of the (for us) imperceptible six substances—ether, air, space, time, soul, manas: also of what is (for us) imperceptible in the three perceptible substances—namely, the atoms. The Vaisesika, it is true, rejects Credible Testimony as a separate Means of Cognition (pramāna), and so the mere fact that the Yogin reports his intuition of these imperceptible matters could not be used to establish their reality: and it is consistently maintained that these things are established by inference (of the sāmānyato dṛṣta type). But there is an obvious difficulty in inference to the transcendent: and the credible testimony of those for whom it is not transcendent, though not a separate means of proof, is at least a valuable auxiliary to inference

(b) in the with-drawn condition.

inherent in these substances,—also of the relation of 'inherence'.—If again they are in the condition called 'viyukta', they can have perception of the subtle, the hidden, and the remote, arising from a contact involving the four factors, and as the result of the yoga-generated qualities."

Perception as process (pramāna) and as resultant knowledge (pramiti, phala).

Pramāna

Pramāņa Prameya "In the case of perception, the instrument is the bare sensuous intuition of the unrelated essence (svarūpālocanamātram pratyakṣam pramāṇam) of general and particular characters (sāmānyaɪriseṣeṣu)¹. The objects are

The inconvenience of making time and space imperceptible is mitigated however by treating the relations founded in time and space as qualities (gma) of things—conjunction and disjunction, nearness and farness, being enumerated among the twenty-four 'gmas'. Relation is not a category for Indian logic,—except the relations of whole to part, of quality and movement to substance, and of the universal (sāmānya) to substances, qualities, and movements, which constitute the separate category of 'inherence' (samavāya). The relation of substances to each other, conjunction and disjunction (samyoga, vibhāga)—which covers their relation to 'time' and 'space', as substances—resolves itself (as has been stated) into a quality of the related substances,—a quality which is perceptible so far as the substances themselves are perceptible. But the imperceptibility of 'inherence' 'remains a difficulty for a system of metaphysical realism which refuses to dissolve the whole into an aggregate of parts, substance into an aggregate of qualities, or the universal into an aggregate of particulars.

'sāmānyarišeṣa here is difficult. But this much is quite clear, that the term does not refer to the category wišeṣa: for this is not perceptible at all.

We are here concerned, not with what may be called categorised perception, but with the simple apprehensions or 'stuff' out of which categorised perception arises: that is, with the objects of undifferentiating perception—nirvikalpaka pratyakṣa. And the objects of nirvikalpaka pratyakṣa—Praśastapāda's ālocanamātra—are here said to be ¿ṣāmānyaviśeṣa, 'generals and particulars'. Śrīdhara (NK p. 185, l. 12 ff.) says that Praśastapāda is here denying the view that what is given in the primary 'moment' of perception is only the general, and is asserting that the particular as well as the general is given in 'bare intuition.' But he goes on to point out that the object is as yet actually neither general nor particular—seeing that 'general' implies inclusion of others and 'raticular' implies exclusion from

the categories, substance and so on¹.

Pramāt**ṛ**

Pramiti

The instrument in the production of 'simple apprehension'.

The agent or subject of the cognition is the soul $(\bar{a}tma)$.

The resultant cognition is knowledge of substances etc.

In the production of know-ledge of 'generals and particulars', the instrument is undivided (aribhaktam V. L. ariyuktam)² bare sensuous intuition³ (ālocanamātram pratyakṣam pramāṇam). Of this there is nothing else as a further instrument (asmin nānyat pramāṇāntaram asti), because it has not the character of a resultant (aphalarūpatvāt).

others: and there is as yet no question of 'others' in an intuition of unrelated characters. Compare Jhā's PSPM p. 158, where the account given of Prabhākara's view of the object of nirvikalpaka jūāna appears to correspond with Prasastapāda's view. See below p. 136 n. 3 ad fin.

 $^{^1{\}rm Sr\bar{i}}$ dhara says: 'the four categories, substance etc.', which means ' dravya, guna, karma, and sāmānya.

²Whichever reading be adopted, the sense would seem to be 'undifferentiated perception' i.e. nirvikalpaka jūāna, simple apprehension of unrelated character without distinction as qualified and qualification under the rubric of the 'Five Predicables'. But see next note, ad fin.

^{*}Srīdhara explains ālocana as a noum of instrument here—ālocyate 'nenety ālocanam—' that whereby it is intuited ' (NK. p. 198, 121), and he interprets the passage to mean that 'the instrument of the bare intuition is the contact between sense-organ and object; this contact being ' that whereby it is intuited'. He explains aribhaktam as kevalam, i.e., jūānāna-pekṣam, not having reference to any precedent cognition. This mere contact of sense gives rise to undifferentiated apprebension of general and particular (nirvikalpakam sāmānyanisesajūānam) as its phala or pramiti. But this undifferentiated or simple apprehension is nevertheless said to be ' not a resultant', in this sense, that it is not a resultant of previous apprehension. It is therefore said to have nothing else—i.e., no other cognition—as the instrument in its production. The case is otherwise with 'differentiated perception' (savikalpakajūana); for this has as its condition not merely the bare sense-contact, but also the simple apprehension (nirvikal-pakajūāna) of the characters which become the qualifications (višegana) in

Alternative statement of perception as process (pramā-na) and result (pramiti, phala)

Pramāṇa

Prameya

Pramātṛ Pramiti

Alternatively $(atha \ v\bar{a})$, the instrument in perception may be taken to be) the unerroneous 'undesignated", apprehension' in respect of all the categories² which is (thus) produced from the contact of the four The objects (will factors. that case be) substance and the other categories. The agent or subject is the soul. The resultant cognition will be the recognition of things as either desirable, undesirable, erent³.'' or

' differentiated perception'. For višistajūāna presupposes višesaņajāāna judgment presupposes simule apprehension.

It seems that Srīdhara's interpretation of the passage is forced: especially in its explanation of \$\bar{a}locana\$ as used in the present sentence. But the passage remains unintelligible. A distinction appears to be made between \$\sin arraycolor{n}p\bar{a}locana\$ and \$avibhaktam \bar{a}locanam\$, which I cannot interpret.

¹avitatham avyapadeśyam mānam. This is a partial paraphrase of

NS I. i. 4, repeating the term avyapadesyam without explanation.

²sarvesu padārthesu catustayas**a**mnikarsād avitatham uvyapadešyan yaj jāānam utpadyate, tat pratyakṣam pramāṇam. It seems clear from this that Prasastapāda did not understand avyapadesyam in the sense which Vācas pati Miśra puts upon it, i.e. as the equivalent of nirvikalpakajūāna or cl svarüpālocanamātra. On the contrary he is equating it with savikalpakajūŭna knowledge of qualified objects ' in all the categories '. This is a resultant of alocanamatra. But it can itself be the instrument of a further result; and when it is thus instrumental its further result is realisation of the practica bearings of the objects perceived. He is merely repeating what Vatsyayam had said: indeed the present passage may be a reference to Vätsyäyana NBh p. 10 H. 1-2—aksasyāksasya pratīvisayam vēttih pratyaksam. vēttis ti samnikarşo juānam vā, yadā samnikarsas, tadā jūānam pramitih. jñānam ladā hānopādānopeksābuddhayah "Perception is the functioning o the several sense-organs in relation to their respective objects. The function ing may be regarded as consisting either in the contact of organ and object or in the knowledge. When the contact is taken to be the functioning o the organ, then the knowledge is the resultant cognition. But when the knowledge itself is taken to constitute the functioning, then the resultan cognition will be ideas of the object as desirable, undesirable, or indifferent '

³Compare Jhā *PSPM* p. 41 ad fin. p. 42, where Prabhākara is stated to draw a precisely similar distinction between two ways of regarding the pramāņa and the phala. The distinction became a commonplace of the late schools. But its philosophical significance is by no means clear.

SECTION 9. SIMPLE APPREHENSION AND COMPLEX PERCEPTION (NIRVIKALPAKA AND SAVIKALPAKA)

How can the *immediate* of Perception be *mediated* in a Perceptual Judgment?

Dinnāga's characterisation of perception as 'stripped of characters'—kalpanāpoḍha—is taken by the schools as the text for the treatment of this topic'. But the discussion is complicated by reference to the question of the relation of language to thought, and by a polemic against the views of certain 'Nominalists' (śābdika)³

How can you characterise the characterless? This is the burden of Uddyotakara's criticism of Diùnāga, a criticism which, as Keith says (ILA p. 71), amounts to the retort that "a consistent sensationalism should be speechless, and therefore unable to give the definition suggested". As Uddyotakara puts it, the theory is like a dumb man's dream—it cannot be communicated (NV p. 45 l. 9 apratipādakatvān mūkasvapnasadṛšam).

²NV p. 44 l. l cites the phrase kalpanāpodham, and NVT p. 102 l. 1 says that Dinnāga's definition is the object of Uddyotakara's criticism in the passage. Vidyābhūṣaṇa (HIL p. 277, footnote) cites Dinnāga's description of perception in Tibetan as from Chap. I of the Pramāṇasanuecaya, and says that the Sanskrit equivalent is pratyakṣaṁ kalpanāpodhaṁ nāmajātyādyasamutam.

I have not met the second half, as here given, anywhere cited. The couplet fited in the Sarradarsanasamgraha is later than Dinnāga, containing as it does the term nirvikalpaka. It is perhaps from Dharmakīrti. kalpanāpoḍham abhrāntam pratyakṣam nirvikalpakam vikalpo vastunirbhāsād asamrādād upaplavaḥ (Chapter on the Bauddhas, ad fin.). The second line of this couplet is quoted by Srīdhara NK p. 190 l. 18 (with visamvādād in place of asamvādād). The SDS, ibid, goes en to quote another couplet as if from the same context:—

grāhyam vastapramāyām hi grahayam yad ito 'nyathā na tad vastu na tan mānam kabdalingendriyādijam.

The meaning of the two couplets seems to be :---

"Unqualified perception is stripped of characters and unerring: qualification is an accretion, since if disagrees with the appearance of the thing. For the object (in perception) has the thing itself as the means by which it is validly cognised: apprehension in any other way than this (i.e. apprehension not immediately derived from the thing) is not reality and is not proof,—neither proof by testimony nor by inference nor by perception". (Gough's translation p. 33 is different.)

na soʻsti pratyayo loke yah sabdanugamad rte anuviddham iva jūānam sarvam sabdena gamyate.

"There is no thought known to experience which is without correspondence with a word: the whole of knowledge is as it were pierced and threaded with words".

who appear to have taught that words and thoughts are inseparable. It is against these 'nominalists' that Vātsyāyana's explanation of the word 'avyapadeśya' in the sūtra is supposed by the commentators to be directed. As against these nominalists', avyapadeśya asserts that there is a moment in perception separable from all use of language². It seems likely³ that Diñnāga took this nominalist view as the starting-point from which to develop his own position. He takes 'name' as the first of the five characters, of which he asserts the pure percept to be devoid: and it may be supposed that his own view was arrived at by accepting on the one hand the Sābdika's view that the thoughts through which we determine reality are inseparably connected with words: and, on the other hand, the Naiyāyika view that what is immediately given in perception is independent of the words by which we come to designate it. But if concepts are inseparable from words, and the percept is separable from words, it follows that the percept is separate from all concepts or determinations of thought.

This same couplet is cited in the $T\bar{a}rkikaraks\bar{a}$ (p. 61) where the view is ascribed to the ' $S\bar{a}bdikas$ ', and is said to amount to the assertion that only perception with qualifications' exists—i.e. there is no such thing as $mirri-kalpakaj\bar{n}\bar{a}na$. The view is thus represented as the antithetical error to that of the Bauddhas, who hold that only unqualified perception— $mirri[kalpakaj\bar{n}\bar{a}na-is$ valid.

But when Vācaspati is polemising against the view that the pure percept is devoid of all characters he gives another interpretation of anyapadeśya, as being a possessive compound meaning having no vyapadeśya. Vyapadeśya in this compound means viśceya, thing-to-be-qualified or subject: and so avyapadeśyajūāna comes to mean knowledge of qualifications unrelated to a thing-qualified. NVT p. 82 l. 8. That is, nirvikalpa is certainly (as against the nominalists) śabdarahita: but this does not mean that it is (as Dinnaga supposed) kalpanārahita or characterless. On the contrary, it is jūtyādisvarūpāvagāhic (NVT, loc. cit.).

²It is illustrated by the experience of infants and dumb persons, e.g. by Kūmarila in the Slokavārtika (pratyaksa, 112):—

asti hy älocanajnänam prathamam nirvikalpakam bälamüküdivijñänasadršam šuddhavastujam.

[&]quot;There is a primary intuitive apprehension, an unqualified perception, arising from the mere real,—like the apprehension of infants and the dumb".

This couplet is quoted in the Tārkikarakṣā, p. 60, in this connection.

³See Vidyābhūsana HIL p. 277, and footnote 1 on page 109 supra.

So that the Naiyāyika's description of the percept as not verbal (avyapadeśya, aśābda) becomes equivalent to describing it as free from those other determinations or qualifications—of class, quality, action, and attendant circumstances or accident¹—which, through the use of words, we assign to the reality present to sense.

The Buddhist is represented² as holding that only pure or unqualified perception (nirvikalpaka) is entitled to the name of perception. He understands by pure perception an appearance (pratibhāsam) which is true to the real (vastuny abhrāntam) as conforming positively and negatively to the svalakṣaṇa³, the unique moment of

^{&#}x27;dravya, as one of the five visesanas or kalpanās (predicables), means some relation to another thing or substance, which serves, in virtue of this relation, to qualify the given thing: as a stick qualifies a man who carries it, or horns qualify the cow which has them. Attendant circumstance or accident is thus a fair rendering.

^{*}By Srīdhara, in NK p. 150 l. 4 ff. His polemic against the Buddhist view of perception falls into two halves (a) p. 130 l. 4 to p. 131 l. 22, dealing with the view that only nireikalpaka is valid, and not savikalpaka; and (b) p. 131 l. 22 to p. 134 l. 3, dealing with the view that perception is kalpanārahita, and that the knowledge of kalpanā's constitutes 'savikolpaka.' But after all these are only two different ways of saying the same thing, viz., that all thought-determinations are illusory as not immediately given. Srīdhara is really meeting the same position twice over, with different sets of arguments. The confusion is due to the different senses in which nireikalpaka is used by the Bauddha and the Naiyāyika respectively; the Bauddha understanding by it perception free from all vikalpa's, white the Naiyāyika uses it of the perception of unrelated vikalpa's.

³Cf. Nyāyabindu p. 103. tasya (i.e. pratyakṣasya) viṣayah sanam. yasyārthasya sanmidhānāsamnidhānābhyām jāanapratibhāsabhedas tat svalakṣaṇam. Tad eva paramārthasat, arthakriyāsāmarthyotakṣaṇatvād vastunah. Ānyat sāmānyalakṣaṇam: so 'numānasya viṣayah.'

[&]quot;The object of perception is the svalakṣaṇa. The svalakṣaṇa is that through proximity to and remoteness from which differences in the cognitive appearances arise. It alone is ultimately real, since competency for action is the definition of real thing. Other objects are sāmānyalakṣaṇa,—such is the object of inference".

Dharmottara goes on to say that the object (visaya) of a $pram\bar{n}\bar{n}$ is twofold: either the object of apprehension $(gr\bar{n}hya)$ —described by the phrase $yad\bar{a}k\bar{a}ram$ utpadyate-that in the 'form' of which knowledge arises (?):

existence which alone is ultimately real (svalakṣaṇānva-yavyatirekānuvidhāyipratibhāsam¹). All the 'predicables' (viśeṣaṇa) or determinations of thought (vikalpa), are untrue to reality (bhrānta), because they are not appearances born of the thing (anarthajapratibhāso vikalpaḥ); being appearances which do not conform to reality (vastvananurodhipratibhāsa), their production

or the object of acquisition, endeavour, or activity (prāpahīya, adhyavaseya; ef. pravrttiviṣaya p. 16 l. 6). "anyo hi grāhyo, 'nyas cādhyavaseyaḥ. Pratyakṣasya hi kṣana eko grāhyaḥ. Adhyavaseyas tu pratyakṣasya bi kṣana eva Saintāna eva ca pratyakṣasya prāpaṇīyaḥ, kṣaṇasya prāpaṇitum aṣakyatvāt", i.e. the object apprehended in perception is the single moment: but this cannot be the object of endeavour or achievement,—the 'prāpaṇīya' of perception is not the single moment: but the series of moments (which of course is unreal). He adds that in inference, on the other hand, the object apprehended (grāhya) is an unreality (anartha): but this unreal is illusorily imposed on the real (āropita), and is conceived of as svalakṣaṇa (svalakṣaṇatvenārasīyate): the svalakṣaṇa thus 'supposed svalakṣaṇa dhyaraṣitam) being the object of activity (pravṛttivisaya).

Poussin (translation of the Sarvadaršanasaingraha chapter on the Banddhas.- Muscon, n. s. ii, 1901, p. 172, feotrote 50) cites these passages,

and concludes that svalaksana = ksana.

As regards the initiality of the object of inference of, the passage cited from Dinnaga at NVT p. 127 l. l. sarro yang animananumcyabhāro buddhyārādhena dharmadharmibhārona na bahihsadasattvam apsksate. "All this business of inference and inferred things depends on the subject-attribute relation imposed by thought, and has no reference to the existence or non-existence of external things."

In what sense there can be nearness to or remoteness from a svalak-

sana so defined remains obscure.

'cp. NV p. 44 II. 2—1 with NK p. 190 II. 5-6 and Nk p. 191 II. 23-24. Uddyotakara says: apare to manyante pratyaksam kalpanāpodham iti. atha keyam kalpanā? nāmajātiyojancti. yot kila na nāmnābhidkīyate, na ca jātyādibhir vyapadišyate, risayarūpānuridhāyiparicchedakam, ātmasæmvedyam,—tat pratyaksam iti. 'Some hold perception to be devoid of thought-determination—kalpanā. What is this determination, this kalpanā? It consists in synthesis with name, and with class. The percept is that which is not designated by a name, nor determined by class and the other predicables; it has a shape corresponding to the unique character of the object; and is self-cognised'.

(Jhā takes paricchedakam as a separate word 'definite', observing in

a footnote that this implies validity.)

The vijūānavādin Buddhist held that cognitions are not perceived through inner sense perception by manas, but are somehow conscious of themselves. Ātma of course does not mean the soul or self—which the Buddhists rejected. The Sarvadaršanasanigraha states svayani-vedanam [svasamvedanam] as the fundamental doctrine of the Yogācāra, i.e. nijnā navādin selvol. In this connection the school used the simile of the lamp—which, self-illumined, illuminates objects. You do not need another lamp to see your lamp by.

being conditioned by 'psychical dispositions' (vāsanādhī-najanma).

We have what seems a perfectly definite perception of a jar of such and such a shape, quite distinct from all other jars. But the Buddhist tells us that all the determinations (vikalpa) which make the supposed 'percept' definite are appearances not derived from the real thing, and that our belief that the thing as thus determined is real, is illusory—

vikalpo vastunirbhāsād visamvādād upaplavaḥ.—Būt is it not the fact that there is correspondence in actual practice (pravṛṭfau saṃvādaḥ)?—The Buddhist replies that the supposed correspondence is due to the fact that the determinations derived from previous experience illusorily impose their own appearances, under the guise of identity with the real thing; and, while obscuring the difference between the svalakṣaṇa and their own manifestations in consciousness, direct men's activities on the place where the svalakṣaṇa is—thus ensuring the 'correspondence' which is alleged'. The gleam of a precious stone is not the stone itself: but it enables us to get it!

But unless the thought determination (vikalpa) is in contact with the thing (vastu sainspṛśati), how could it impose itself as identical with the thing? Even a mirage has an objective ground!—The reply is that thought uses the percept as a vehicle (pratyakṣapṛṣṭha-bhāvī vikalpaḥ) and so, assuming the function of the instrument of knowledge, presents to us a thing that can be acted upon (arthakriyāsamartham vastu sākṣātkaroti),—otherwise the person desirous to act could not act on the basis of his thought-determinations. This is what the Buddhist writer meant when he said "thence also it is on the real thing that we act as a result of thought-determinations" (tato 'pi vikalpād vastuny eva pravṛttiḥ).

NK p. 190 l. 20 svalaksaņadeše purusam pravartayati samvādayati

—But does not this amount to the admission that thought (vikalpa) is after all a means of knowing the real thing, seeing that it is the source of apprehensions which correspond with the real thing (vastuni pramāṇam, tatrāvisamvādipratītihetutvāt)?—The Buddhist tries to avoid the admission by saying that between the momentary existence which is the real object $(gr\bar{a}hya)$ of the perception and that which is the 'object' (adhyavasīyate) of the thought, and between this latter again and the 'object' achieved (labhyate) in the ensuing activity, there is regarded as momentary existents—no correspondence, because they are all momentary. Regarded merely in the light of an exclusion of what is other, we can indeed find a certain correspondence in the percept, the idea, and the object achieved,—if we abstract from the (real) diversity which belongs to them as absolutely distinct 'moments' of experience 'anākalitakṣaṇabhedasya atadvyāvrttavastumātrāpekṣayā samvādah). We cannot say that the object of perception is the object as determined by thought, nor that either of these is the object achieved or got practically. But we can say that the object grasped in perception is $like^2$ the object as determined by thought. and that the latter is like what is achieved by activity (yādṛśaḥ kṣaṇaḥ pratyakṣeṇa gṛhyate, tādṛśo vikalpenādhyavasīyate, etc.)3. But even so the thought-determination (vikalpa) will not be an independent means of

Lor the distinction between the grāhya, on the one hand, and the adhyavaseya or prāpaṇāya or pravṛttiviṣṇya, on the other hand, see NBT p. 15 1. 20 to p. 16 1. 7 referred to above, note 3 p. 121. (That passage only makes a twofold distinction in objects (rɨṣaya), whereas Srīdhara makes it threefold here by distinguishing the adhyavaseya of the vikalpa from the pravṛttiviṣaya). The difficulty is that the doctrine of the momentariness of the real destroys the unity of the object (vɨṣayaikatā). Having destroyed it, the Buddhist casts about for some way of restoring it—for practical purposes.

The question is (as we should put it)—what is the relation between the previous impression, the mere idea, and the subsequent impression? Not numerical identity—all are momentary, and the one has disappeared before the other begins to be. But a sort of likeness.

knowledge, seeing that it only apprehends the already apprehended (And what the Buddhist is arguing here is that vikalpa is not a pramāṇa). For it is by perception and nothing else that an object of this character (which now appears in 'idea') was originally grasped). . .

We (the *Bauddhas*) admit however that a thought determination derived from an inference (*lingaja*) is an independent means of knowledge,—because it apprehends something of which the unique being has not been already grasped by another means of proof, i.e. by perception (*pramāṇāntarāprāptasvalakṣaṇaprāpakatayā pra-*

 $m\bar{a}nam^2$. (But this is another matter.)

—This position too is unsatisfactory, replies the Naiyāyika. For the momentary existent's 'exclusion from-what-is-other' (anyavyāvṛtti)—and the unreal common character illusorily imposed upon it in virtue of this negative character of excluding-what-is-other—is not grasped (gṛḥyate) by perception, seeing that the object (gṛāḥya) of perception is characterised by the Bauddha as a 'cause' (hetu), and unreal things (such as this illusorily imposed common character of being different-from-what-is-other) are devoid of all practical

Like memory, which on this ground is refused the name of pramāṇa in the Indian schools. The original experience is the instrument of knowledge—not the memory, which only repeats the original experience. So with 'ideas' (in the Humian sense),—they only repeat 'impressions', and are not therefore an independent instrument of knowledge. The idea only apprehends over again what has been apprehended in impression.

²svalakṣaṇa in this compound cannot be taken as the object of prāpakatayā, because inference never grasps the svalakṣaṇa, its object being always sāmānyalakṣaṇa—see Nyāyabindu p. 103 l. 13 anyat sāmanyalakṣaṇam. so 'numānasya viṣayaḥ.

[&]quot;Poussin, op. cit. p. 73 note 46, observes that the doctrine of apoha, "la non-compatibilité avec ce qui est autre", is inseparable from the theory of svalakṣaṇa. He cites from lītmatattvaviveka 48, a definition—yac cātyantavilakṣaṇām sālakṣaṇyavyavahārahetus, tad anyavyāvṛttirūpam—"exclusion of what is other is the ground of the practical notion of sameness of character in things which are absolutely diverse in character". According to the Bauddha 'sarvam pṛthak'—the atomistic principle which finds expression in the doctrine of svalakṣaṇa or kṣaṇa—there cannot be any positive resemblance in reals. A cow is like a cow in virtue of what both are not.

efficacy (samastārthakriyāvirahāt),—(and therefore could not be a 'cause' of perception or of anything else). It is the momentary existent that possesses practical efficacy, and so is real (paramārthasat); and it is this therefore that is the object of perception. (And so it is impossible for the Buddhist to deny that thought is a means of cognition on the ground that its objects have already been given in perception: i.e. or the ground grhītagrāhitavāt.)—And it cannot be said that the object of the thought is one with the object of perception, because the percept is a momentary existent and is said 'not to extend up to the time of the thought' (rikalpakālānanu-pātīty uktam).

And if it be allowed that there is some single object of unexplained character—common to the thought and the perception, which could admit of a correspondence for practical purposes (pravyttisamvādayogya), thought would not fall outside the definition of a source of knowledge. because (1) the idea has no reference to impressions which might have preceded it in determining the object, the case being similar to that of a series of relatively independent impressions derived from an object¹; and (2) because what has been conceived in thought is capable of being applied in action (adhyavasitaprāpanayogyatvāt).—And, if thought' is thus established as a source of knowledge, it must be classed under the head of perception, because (1) the thought-determinations by which the object in perception is qualified are not referred to the object through a middle term (so that the process is not inferential); and (2) because it occurs when organ and object are in contact,

^{&#}x27;dhārārāhikabuddhi. Faddegon explains: "streamlike intellection, i.e. a series of intellections, all referring to one object, and arising when our attention remains fixed upon a certain object for a certain time".

Fi.e., of course, vikalpa in the special sense of 'the work of the understanding' in constituting the object of 'qualified' perception (that is, of the perceptual judgment).

and does not occur otherwise (so that it must be regarded as indriyārthasamnikarsotpanna)¹.

But although these determinations of the percept are no less produced by the object (arthaja) than the pure or unqualified percept (nirvikalpaka), the qualified perception of the object does not arise through the mere contact of organ and object. A further condition is necessary. This condition (according to Śrīdhara) is the remembering of the word² which names the qualification in question (vācakaśabdasmarana).—In that case, the Buddhist objects, ought not the thought-element in perception to be classed under memory³ as being generated by a memory and not by organ-and-object? for the part played by organ-and-object is eclipsed (vyavahita)

But it occurs when another organ than that which would give the rikalpa' in question is in contact with the object, e.g. I see the fragrant sandal. The eye cannot see the fragrance: though the fragrance as thus belonging to a perceived object is not a free idea but 'sense-bound and sense-sustained'. (Ward, Psychological Principles, p. 186). This case is recognised as a form of alaukikasannikarşa (i.e. 'contact' in other than the usual sense) under the name jūūnalakṣaṇāpratyūsatti, in the later schools: the example being that given above of the fragrant sandal (surabhi candanam). Cf. Ward, op. cit., p. 168 "The manner in which the constituent elements of a percept are combined differs materially from what is strictly to be called the 'association of ideas'. To realise this difference we need only to observe first how the sight of a suit of polished armour, for example, instantly reinstates and steadily maintains all that we retain of former sensations of its hardness and smoothness and coldness; and then to observe next how this same sight gradually calls up ideas now of tournaments, now of crusades' etc.

The importance here given to words is surprising. We might be prepared to admit that judgment—holding subject and predicate apart—is dependent on the use of words, i.e. that judgment is inseparable from proposition. But judgment is perhaps a stage beyond qualified perception', savikalpakajūāna. An opponent has pointed out (NK p. 189 l. 15) that the actions of brutes incapable of language imply qualified perception of objects (sabdavyutpattirahitānām api tirascām arthavikalpāt pravṛltiḥ), and has maintained on this ground that all perception is in fact 'qualified perception'.' Srīdhara fails to answer this difficulty.

In which case it would not be a pramāņa. See note 1 p. 125 supra.

by that of memory. The Naiyāyika replies that auxiliary circumstances (sahakārin) do not oust the inherent power of the thing: you would not say that the seed is not the cause of the production of the shoot on the ground that it is eclipsed by auxiliary conditions of growth like earth and water!—But what is the assistance (upakāra) rendered by the memory of the word to the organ and object, that it should be called an "auxiliary circumstance"?—The answer is that, as the thought-determination in its arising corresponds positively and negatively to the organ-and-object, so also does it correspond positively and negatively to the word-memory'. The assistance rendered by the memory to the organ-and-object then is that, organ-and-object alone failing to produce their effect, they produce it when the memory of the word is present as an auxiliary circumstance. And the Buddhist's view that "characters which add nothing to the inherent nature of the thing itself would not be 'auxiliaries'2' has already been rejected when we

The thought-determination occurs (other conditions being fulfilled) when organ and object are present, and does not occur when either is absent. Similarly it occurs (the other conditions being present) when the memory of the word is present, and does not occur when the memory is absent.

²avarūpātišayānādhāyino na sahakārina iti. cp. NKe p. 73 1. 25 yadi sahakārino bhāvasyātišayam na janayanti nāpeksanīyā akimcitkaratvāt "unless the so-called aexiliaries produce some additional character in the (principal) cause itself, they need not be taken into account, because they effect nothing". See the following note.

Srīdhara's discussion which has been given above is not a very profitable piece of scholasticism. I give it for want of an earlier (and better) treatment of this topic.

The Buddhist argument in support of the doctrine that all things are momentary is stated in the Sarvadarśanasangraha, chapter on the Bauddhas (the section corresponding to pp. 16—20 of Gough's translation). It is also expounded in the pair of tracts by Ratnakīrti entitled kṣaṇabhaṅgasiddhi, which are included in Hara Prasad Sāstri's Six Buddhist Nyāya Tracts in Sanskrit. (One of these tracts sets out the positive and the other the negative argument.) The Naiyāyika reply is given by Srīdhara NK pp. 72—82 (Faddegon analyses this passage pp. 593—5, and translates it pp. 384—403.) The context in which Srīdhara refutes the theory of momentariness is the ātmanirāpana or exposition of soul as the permanent subject of experience.

had occasion to refute the doctrine of momentariness (kṣaṇabhaṅga).

The Buddhist starts by identifying existence with causal efficacy (arthakriyākāritva). He then exposes the antinonies of the concept of causation in a manner similar to that of F. H. Bradley in Appearance and Reality, arguing that a permanent entity is inconsistent with production of effects-kramākramavyāvīttāv aksaņikāt sattvavyāvīttiķ, "a permanent entity cannot exist because its various effects cannot be produced either successively or simultaneously (SDS loc. cit.). Not simultaneously; because if it could produce all its effects at once it would do so, and would produce them as much at one time as at another,—unless you suppose that having discharged itself of all its efficacy once and for all it retains an altogether impotent sort of 'permanency' thereafter; which would be like looking for a crop from the grain that the mice have eaten (sthūyitvavṛttyasā mūṣikabhakṣitabījādāv aṅkurajananaprār-thanāṃ anuharet. SDS). Nor yet successively: for what can produce an effect does so forthwith-samarthasya ksepäyogät "postponement being out of question in the case of what has the capacity ' (this phrase occurs in SDS loc. cit. and in NK p. 73 l. 23. Poussin p. 64 note 24 renders 'il ne convient pas que celui qui est capable d'un acte le diffère' convient pas que celui qui est capable d'un acte le diffère' capable d'un acte le diffère' capable d'un acte le diffère' capable d'un acte le diffère capable d'un acte le and refers to NVT p. 388 1. 18 and 27 and p. 389 1. 8, where the same phrase is twice repeated. It is the stereotyped formula which sums up the dialectical attack on permanent causes). And conversely what does not produce an effect is incapable of producing it. In virtue of these two principles (called the prasanga and the prasangaviparyaya) it is clear that the supposed permanent entity possesses two contradictory properties : for it both has, and has not, the capacity to produce its effects: it has the capacity, in so far as it is now producing its (present) effect; and it has not the capacity, in so far as it is not now producing its (past and future) effects.

It is at this stage in the discussion that the Naiyāyika brings in the notion of auxiliary conditions (sahakārin, which Poussin renders co-facteur). sahakārilābhāt sthāyinah (sic) atītānāgatayoh kramena nanu kramavat karanam (Poussin, for textual kramanam) upapadyate-" the successive production of past and future effects by the permanent entity is possible as the result of its getting auxiliaries in succession". The Buddhist asks: does the auxiliary render any service ($upak\bar{a}ra$) to the entity or not? If not, we may disregard them, as, doing nothing, they cannot serve its purposenāpekṣaṇīyās te, akimcit kurvatām tešām tādārthyāyogāt (this is the reading of the 1902 Bombay text, confirming Poussin's conjecture for tādātmyāyogāt). But if they do give any assistance, does the assistance remain something distinct from the entity, or not? If it remains something distinct, then it is this something distinct from the permanent entity that is the cause of the effect—since the effect is present when this adventitious additament (agantukātisaya) is present, and absent when it is absent. • (Even in the light of Poussin's rendering, p. 66, I cannot understand the citation in the SDS at this point. Gough mistranslates it). But the Naiyāyika holds that it is the permanent entity, in conjunction with the auxiliaries that produces the effect: and so it is from the nature of the thing (svabhāva) that the effect arises. It will however be no easy matter for the permanent entity to grapple these 'adventitious additaments' to itself (as it must do to produce its effects)—since (by hypothesis) it does not depart from its own nature (sva-bhāvasyānapāyāt). It must not let its auxiliaries go—it must hold them with a noose round their neck even as they are making off, in order to-

SECTION 10. THE DOCTRINE OF THE REAL UNIVERSAL

A partial answer to the Buddhist attack on the 'percept'—savikalpaka pratyakṣa—is to be found in

produce the effect which is to be produced " (sahakāriņo na jahyāt, pratyuta palāyamānān api gale pāšena baddhvā kṛtyam kāryam kuryāt. SDS). Now when the entity (bhāva) takes to itself a distinct additament (atisaya), x, in the form of the service (upakāra) rendered by its auxiliary (sahakārin) does the additament produced by the auxiliary generate another additament, or not? If it does, there will be an infinite regress of additaments and auxiliaries; if it does not, the so-called auxiliary will not be an auxiliary (Vācaspati contents himself with this brief indication of the dilemma at this point—upakārāsyopakārāntarajanane anavasthānāt; ajanane tu sahakāribhāvābhāvāt. NVT p. 388 l. 24).

The dilemma amounts to this. A. If the additament leads to no further additament then (a) the effect might appear at any time at which the so-called causal entity might happen to add to itself the additament. You can only avoid this consequence by adding that the causal entity takes on the additament only when in relation to the auxiliary (bijam atisayam-ādadhānam suhakārisāpekṣum cvādhatte): (b) the so-called casual entity—the seed, for example—might be no cause at all, the effect being produced by the additament. To avoid this contingency you will have to add that the additament or 'service' (upakāra) is an additament or service relating to the causal entity, e.g. the seed.

In order to avoid the above horn of the dilemma you must adopt the second alternative. But in doing so you fall into a many-faced regressus ad softnitum (bahumukhānavasthā), thus:

B. If the additament is thus admitted to lead to further additaments, then (a) You have added to the seed which has the additament which makes it productive the further additament of relation to the auxiliaries. But as this further additament, like the former, can only be generated by the seed in relation to an auxiliary (tasmin apy upakāre pūrvanyāyena sahakārisāpeksasua bijasua janakatve), there will be an infinite regress of additaments arising in the seed after acquiring successive auxiliaries (sahakārisampādyabījagotātišayānavasthā prathamu). (b) You have added to the additament itself, or service rendered, the further additament of relation to the causal entity (i.e. the service must be service to the seed: a qualification is thus added to 'service'). But this entails a second regress arising from the series of additaments-resident-in-additaments generated by the seed (bī/čdijanyātišayanisthātišayaparamparāt iti dvitīyānavasthā). The service to the seed is an additament qualified by the further additament 'to the seed': and this further additement will be qualified by the still further additament that it is an additament to the additament; and this still further additament is a yet still further additament to the additament-to-the-additament-to-theseed,—and so ad infinitum. In order to relate a to a, the service to the seed, we must conceive x as having the further characteristic of y i.e. of being related to a. And then we must conceive y as having the further property z, symbolising its relation to x; and so on. Relatedness in fact means an infinite series of terms. [See McTaggart's Nature of Existence pp. 88-89 " every characteristic of a substance generates an infinite series of characteristics of that substance . . . If we start with an original relationship,

the assertion that the universal $(s\bar{a}m\bar{a}nya)$ is a perceptible reality distinct from the particular. Sridhara says: " if we shall be able to show that the universal is real, then the apprehension of the characters (by which we determine objects in 'differentiating perception') will have these real universals for its objects, and will be perceptual apprehension because produced by (contact between) sense-organ, and object¹''. The real universal is an object of sense no less than the particular: so that sense-perception gives not a bare 'this', as the Buddhist supposes, but determinations also. Sridhara sums up the Naiyāyika reply to the Bauddha as follows: "Thou ht which grasps objects as qualified (viśistagrāhin)... is not a 'fiction of the understanding'; because the qualification, the qualified thing, and the relation between them in virtue of which they are determinand and determinant, are all real (vāstavatvāt)2".

there is the derivative quality of standing in that relationship, the derivative relationship between the substance and that quality, and so on again without end". McTaggart however adds that these infinite series are not vicious, because it is not necessary to complete them in order to determine the meaning of the earlier terms.] (c) In the same way the seed takes on another characteristic in virtue of its being related to the service rendered (evam apeksyamāṇenopakāreṇa bījādau dharminy upakarāntaram ūdheyam): and so there arises a third regress resulting from the series of additaments having as their substrate the additament to the seed imposed by the service rendered (upakārādhayabījātiśayāśrayātiśayaparamparāt tṛtiyānarasthā).

Thus both horns of the dilemma tarising from the first main alternative, called by Vācaspati 'bhinnopakārādhāna', i.e. that the addition made by the auxiliaries is something distinct from the causal entity or primary causes lead to impossible consequences. We now pass to the second main alternative, that the addition is not something distinct,—abhinnopakārādhāna

(NVT p. 388 1. 21 and 1. 24 uses both these terms:

If the service rendered by the auxiliary is not distinct from that to which it is rendered then the latter, the supposed permanent causal entity, ceases to exist, and is replaced by a new entity, viz., the causal entity plus the added quality. The original A has been replaced by an Ax. But this is just what the Buddhist maintains in his doctrine of the kurradrūpa, the immediate momentary autocedent of the effect. That is, the admission that the additament forms part of the supposed permanent entity when added to it, amounts to the admission that there is no permanent entity. Q. E. D.—phalitam mamūpi manorathadrūmena "the tree of my desire has borne its fruit".

* 1NK p. 193 II. 4—6. 2NK p. 193 II. 17—18 eram pratītir . . . višistagrāhiņī no kalpanā, višesaņasya višesyasya ca tayoh sambandhasya ca vyavacchedyavyavacchedaka-bhāvasya vāstavatvāt. The reality of the 'relation' bere

To this the Bauddha replies: "Cognition which grasps the real thing is engendered from contact of the organ with the thing just so as the thing is,1 and does not proceed by first reflecting upon the thing (na tv arthe vicārya pravartate). Apprehension of a thing as qualified (viśistajñāna), on the other hand, is a reflective process. A man says to himself 'this is the qualification', 'this is the thing qualified', 'this is the relation between them', 'people do not talk about a stick with a man, but a man with a stick': and after thus reflecting on each of the factors separately he makes a unity of them, and cognises 'a man-with-a-stick' (paścād ekīkrtya grhņāti). If the qualifiedness of the thing were real (yadi vastavī viśistata), the apprehension of the thing as qualified would arise from the very first. If it does not do so, this means that the qualifiedness does not belong to the thing in its own nature (svarūpatah), but is constituted by some superadded condition (upādhikrta)2".

The doctrine of the real universal makes its first appearance in the seventeen sūtras which form the second āhnika of the first adhyāya of the Vaisesika Sūtra; and Prasastapāda's brief treatment of the topic³ seems to follow the teaching of the Sūtra fairly closely. Dinnāga attacks the Vaišesika doctrine in a fragment⁴ of six lines preserved in the Sarvadarsanasanigraha. Prabhākara replies to his criticism, and enunciates the realistic doctrine in a different form⁵. There is, besides, a passage in the Nyāyasūtra6 which, in dealing

'yathābhūto 'rthah, tathopajāyate, i.e. it should be an immediate impression in point-to-point correspondence with the reality or archetype.

spoken of is of course fundamental. And I do not know that the Nyāya-Vaisesika school have any satisfactory account of it to offer. The doctrine of the real universal is not a complete solution.

²NK p. 193 ll. 19-24. As observed in a note just preceding, our school hardly deals with this difficulty: unless we can find a solution in the Vaisesika doctrine of caregories. I do not think we can.

³PBh. pp. 311—314. See also ibid. p. 11 and p. 19. ⁴See Fragments from Dinnaga, fragment Q.

⁵Jhā, *PSPM*, pp. 94—101.

NS II. ii. 65-71.

with the nature of words, distinguishes the 'class' (jāti) from the individual (vyakti) and from the 'form' (ākṛti), i.e. the mark by which a class-nature is recognised: but there is nothing said as to the ontological character of this 'jāti' which is merely defined by 'production of the like' (samānaprasavātmikā jātiḥ NS II.ii.71) and seems to be what we should call a natural class. It seems that the doctrine of the real universal was primarily a Vaiseṣika doctrine; though the Nyāya-sūtra also knows it.'

The Vaiścṣika Sūtra teaches that sāmānya and viścṣa are relative to thought (sāmānyaviścṣa iti buddhyapckṣam I.ii.3): The meaning of this seems to be explained in the two following sūtras which say that Being (bhāva=sattā) is only sāmānya, because it is the ground fi•inclusion only (anuvṛtter cva hetutvāt); while 'being a substance', 'being a quality', and 'being action' are both sāmānya and viścṣa. Sūtra 6 says that sāmānya resides elsewhere than in 'ultimate differences' (anyatrāntyebhyo viścṣɛbhyaḥ). The universal 'Being' is what is meant when we assert existence of substances, qualities, and actions: it is a different thing from substances, qualities, and actions (dravyaguṇakarmabhyo' rthāntaram sattā I.ii.8). It is neither action nor quality, because it resides in 'actions and qualities' (9): moreover there is absence in it of sāmānya and viścṣa' (10). After

^{&#}x27;Greek influence could be suspected, but there is nothing to prove

Reference to the Vaisesika doctrine of the eternity of the universal is clear (e.g.) in NS II. ii. 15 na, ahatābhārasāmānnavituatvān nityesv apy anituavad upacārāc ca. The previous sūtra has taught that sound is non-ternal because it is an object of sense-perception. This sūtra objects that universals are objects of sense-perception and yet are eternal.

²No specific argument is given that it is not substance. But this follows as a corollary: for if it were a substance we should have the absurd consequence that substance resides in actions and qualities—the reverse of which is the truth.

[&]quot;sāmānyavišesābhāvena ca. This same formula is repeated in sātras 12, 14 and 16 as a proof of the reality of the subordinate universals being substance', 'being quality', and 'being action'. Universals do not reside in universals, but only in substances qualities, and actions. This

similarly arguing the reality of the subordinate universals dravyatva, guṇatva, and karmatva (sūtras 11-16), the section concludes with the assertion that Being is one because the character of 'existence' is not different (in the various things which are said to exist), and because there is no specific mark (through which we assert existence). The perceptibility of universals is asserted in another passage (VS VII. i. i. 13)², but there seems to be no statement that they are eternal³.

It has been held that VS I.ii.3 asserts the subjectivity of the universal, and that therefore the $S\bar{u}tra$ does not teach the doctrine of the real universal. But it is out of the question to assert this in the face of the explicit statement of I.ii.8, and of the general sense of the section. The doctrine of the $S\bar{u}tra$ is fundamentally that taught by Prasastapāda in the $Bh\bar{a}sya$.

"Universals are of two kinds, primary and subordinate. The universal is ubiquitous within its proper sphere, identical, resident in more than one substrate, and is what makes us think of a thing as

was the constant doctrine of the school; and it led to the awkward consequence that 'Being', as a universal, is not predicable of universals themselves.

¹sad iti lingāvišeṣād višesalingābhāvāc caiko bhāvaḥ. I. ii. 17.

***ctena gunatve bhave ca sarvendriyam vyākhyātam. "By this it is explained that there is knowledge of the universals being quality and being through all sense-trgans". It is not clear why only these two universals are mentioned: presumably dravyatva and karmatva are thought of as implied. At any rate the statement must apply to them also.

FBut it must have been a dectrine of the school before Prasastapāda, since (as stated above, p. 133 n. 1) it is referred to in the $Ny\bar{a}ya$ $S\bar{u}tra$: and it is impossible that the $Ny\bar{a}ya$ $S\bar{u}tra$ should have been redacted after the date of Prasastapāda.

⁴Cowhood is present in all cows.

Because the essence whereby it resides in one cow is the identical essence whereby it resides in another cowe there being no difference in the conception of cow-nature in different cases.

⁶If you say that it is impossible for one thing to reside in many, the answer is that impossibility cannot be asserted of a thing which is established by a valid means of cognition—in this case, by perception. na hi pramāṇāvagate 'rthe kācid anupapattir nāma. NK p. 313 l. 6. Experience shows cowhood resident in many cows.

conforming to its essence—whether the thing be one individual, or two, or many. In other words, without losing its identity it is resident in a series of substrates, and is the ground of the thought of one nature running through all. How so? When we have a series of experiences of this, that, and the other individual, a mental disposition or impression is generated by the thought of repetition, and thereby the series of past experiences is remembered, and we realise that the factor of commonness which runs through them all (sāmānyāpckṣam . . . yad anugatam) is the universal.

The primary universal (spoken of above) is the universal 'Being' (sattāsāmānya), and gives rise to the thought of inclusion (anuvrti)¹ only. As the result of contact of a single indigo-stuff with leathers, cloths, blankets, and so forth, all of which are different from one another, there arises an identical thought about them all, viz., that each of them is blue²: and in the same way we have an identical thought about substances, qualities, and actions, which are all different from each other, viz., that they all exist (sat sad iti pratyayānuvrtih)³. And this thought must come from something other¹ than substances, qualities, and actions, as such. This 'something other' is the universal 'Being';—the reality of which is thus established. From union with the universal 'Being' the identical thought recurs in the case

^{&#}x27;anuvṛtti, anugama, etc., are troublesome to translate. The idea is that of the one in the many,—one nature running through many individuals, to which all conform. 'Inclusion' is not an accurate rendering, but practically convenient.

 $^{^{\}circ}$ This passage (or something similar) is referred to by Uddyotakara in NV p. 319 l. 16. See above, p. 28 n. 3.

This phrase has a variety of forms. Sometimes we find anuvṛttipratyayaḥ, sometimes anuvṛttapratyaya, here pratyayānuvṛttiḥ. Similarly when anugama and anugata are substituted for anuvṛtti and anuvṛtta.

^{*}arthāntarād bhavitum arhati. Compare VS I. ii. 8—dravyaguņa-karmabhyo * rthāntaram sattā.

of each thing that it is: and therefore 'Being' is a universal, and the Summum Genus'.

'Being substance', 'being quality', 'being action', and the rest² are subordinate universals, because they are the ground of the thought of exclusion as well as of inclusion (anuvṛtti-vyāvṛtti-pratyayahetutvāt). A subordinate universal is thus both genus (sāmānya) and species (viśeṣa)³. Thus substance-hood is a genus

tasmāt sattā sāmānyam eva. He seems to combine two thoughts here (a) that sattāsāmānya is a reality, and (b) that it is only sāmānya, never višesa—i.e. that it is the Summum Genus—as stated in VS 1. ii. 4.

[&]quot;"the rest' means the universals subordinate to substance-hood, quality-ness, and action-hood,—e.g. pṛthvītva, rūpatva, utkṣepaṇatva, etc. It comprises all universals other than sattū.

[&]quot;riśesu suffers from an unfortunate ambiguity.

⁽a) As one of the categories of the Vaisesika system it means thosy ultimate differences which separate unique entities such as atoms from each other. Each of these entities is regarded as absolutely sui generis, and so their differences are not specific differences: in fact about these differences nothing can be said except that they are differences. The difference of one atom from another is not in virtue of some character which it shares with anything else; but in virtue simply of its own uniqueness. Such a difference therefore cannot be specific. If it were, you would again have to look for a difference to distinguish the members of the species—and so ad infinitum. If you are to avoid this infinite regress, you must admit sooner or later the reality of unclassable uniqueness of character. And this is visesa as an antimate category. This category suggests, and perhaps has, some relation to the Buddhist conception of apoha.

⁽b) But—in a secondary sense, as Praśastapāda himself says just below—specific differences are also called viścṣa. And these viścṣa's are in fact sāmānya's, universals, because they are the common property of a class of things. In the vast majofity of cases in which the term viścṣa is used, it is used in this latter sense—naturally so, since viścṣa in the other sense is a mere surd or fullstop to thought, about which there is nothing to say except to assert its existence. It is commonly said that the Vaiśeṣika system derives its name from the category viścṣa. But Faddegon argues, on good grounds, that in fact the system is so called by reason of its characteristic method of proceeding sādharmyavaidharmyābhyām, 'through likeness and difference'. These differences (vaidharmya) are of course viścṣa in the so-called secondary sense, and not the category viścṣa, which is not available for the practica, purpose of drawing distinctions. The Vaiśeṣika school is characteristically the school of distinctions'.

Ui states that later Vaisesika manuals sometimes creeted sāmānyavisesa into an additional category, side by side with sattāsāmānya, on the one hand,—which is only sāmānya—, and with rišesa (the category) on the other hand,—which of course is only rišesa (never sāmānya). We often meet the compound sāmānyavišesa, and it can usually be translated 'specific universal', 'subordinate universal', being used to distinguish all other universals from

But these universals, substance-hood, and the rest are in the primary sense genera $(s\bar{a}m\bar{a}ny\bar{a}ni)$, because they comprise many things: it is in a secondary or transferred sense $(bhakty\bar{a})$ that they are called 'riseşa', from the fact that they differentiate their substrates (from other things)².

That these universals constitute a separate category (padārthāntaratva) from substance, quality, and action is established by the difference in their characters (lakṣaṇ-abhedāt). And for this very reason (i.e. that they are different from substance, quality, and action), universals are eternal³. And universals are different from each other because they are determined to residence in substances¹, and so on: and because the thought of one

sattāsā nānya, the universal Being. The use c! this term to denote the objects of ālocanamātra, bare intuition, in the section on perception in the Bhāṣya, constitutes one of the difficulties of that section. We know that some held the view that the object of uirrikalpakajūāna (-ūlocanamātra) was simply Being. And Śrīdhara tells us that Praśastapāda meant that not merely sāmānya but also riścṣa was apprehended in bare intuition. That is, bare intuition apprehends universals of all sorts,—not only Being, but also being substance, being quality, etc.

^{(&#}x27;All sorts of universals' is of course a phrase condemned by the \tilde{sastra} : each universal has $srar\tilde{u}pasatt\tilde{u}$, and we may not class them. But even Prasastapāda says $s\tilde{sm}\tilde{u}nya\tilde{m}$ dviridham!)

¹For brevity I omit eight lines of the text, which show, in the same way, that the same thing is true of all subordinate universals.

 $^{^2}sv\bar{u}\acute{s}rayavi\acute{s}esakatv\bar{u}d$ bhaktyā ri $\acute{s}es\bar{u}khy\bar{u}ni.$ On this see the last note but one.

^{*}Srīdhara says: ''If universels were identical with substances, etc., they would perish on the destruction of the substance, etc., and would come into being with its origination. But as they are different, this rule does not hold''. NK p. 315 l. 6. For the difference in character', see the definition of the universal with which the present passage of the $Bh\bar{a}sya$ opens. Eternity was not mentioned in the definition; no doubt because Prasastapāda intended to treat it as a corollary from the definition.

 $^{^4}$ Some universals reside in substances, others in qualities, and so on and this determinate choice of substrates shows difference in the universals themselves. NK p. 316 l. 20.

universal differs from the thought of another universal. And each universal is *one*, because it shows no difference of character as residing in its several substrates, and because there is no character of difference¹.

Although universals have no determinate location (aparicchinnadeśāni sāmānyāni), nevertheless each is 'ubiquitous within its proper sphere' because the conditions under which each is manifested art determinate (upalakṣaṇaniyamāt), and because there is a definite totality of conditions requisite for the production of the individuals which manifest the universal (kāraṇasāmagrīniyamāt)². And universals are not to be indicated in space (antarāle avyapadeśyāni) because they cannot reside there either by relation of conjunction (saṃyoga) or by that of inherence (samarāya) ''.

In an earlier passage³ which treats of the likenesses and differences (sādharmyaraidharmya) of the categories, Praśastapāda mentions seven characteristics common to the three categories of Universality, Ultimate Difference, and Inherence, which differentiate them from the other three categories, Substance, Quality, and Action.

"The three categories of Universality, Ultimate Difference, and Inherence have the characteristics (1)

¹pratyokam svāśrayesu lakṣanāviścṣāl viśeṣalakṣaṇābhāvāc caikatvam.

Compare VS I. ii. 17 sad iti lingāvisesād visesalingābhāvāc caiko bhāvah. Prasastapāda makes the insignificant change of linga into lakṣaṇa in quoting. The more important modification which he introduces is in the application of the formula, which in the sātra is used to establish the unity of sattā, Being, only, whereas Prasastapāda uses it to prove the unity of every universal. The result of this modification is that the second phrase in the formula, visesalakṣaṇābhāvāt, ceases to have any distinct meaning. Srīdhara tries to give it a distinctive meaning by interpreting lakṣaṇa (in the second phrase) as pramāṇa—" there is no nyans of proving difference".

²i.e. because a universal only shows itself in a particular kind of thing, and because things of that particular kind do not come into existence at random, but under fixed causal conditions. Sridhara glosses the first phrase by abhivyanjakasya avayavasanisthānavisesasya niyatatvāt—because the special collocation of parts which manifests the universal is fixed by rule.

^{*}Bhāsya, p. 19, l. 1.

that their Being consists in their own essence or unique nature (svātmasattva); (2) that they have thought for their characteristic (buddhilakṣaṇatva); (3) that they are not effects; (4) that they are not causes; (5) that they do not possess genus and species (asāmānyavišeṣavattva); (6) that they are eternal; (7) that they are not called 'things' (arthasabdānabhidheyatva)''.

The following observations may be made under these seven heads:—

(1) Substances, qualities, and acts are held to exist in virtue of a universal 'Being' residing in them. other words these three categories all exist in the same sense: existence is a class-notion applicable to all these three categories. In their case sattāyogah sattram—ex-"istence consists in being united with a universal 'Being' —as Śrīdhara expresses it. But we cannot bring the universal 'Being' itself under the same class-concept: we cannot say in this sense that 'Being is'. For this will lead to an infinite regress (anavasthā), since it means that Being has a Being, which again has a Being . . . ad infinitum. Nor can we bring any of the other universals under a further universal without falling into an infinite regress. Blue things possess blueness, but blueness does not possess blueness-ness; for if the latter supposition were made', there would be no limit to the multiplication of super-universals.

^{&#}x27;At a later time Udayana formulated the six jātibādhaka, or impediments to universality, in a couplet which became the current coin of the schools: vyakter abhedah, tulyatvam, samkaro, 'thānavasthitih, rūpahānir, asambandho, jātibādhakasamgrahah.

 ⁽i) A class must include more than one thing, so that there can, for instance, be no class-nature of ether (akāšatva):

⁽ii) the same thing under different names will not give rise to a class-notion, e.g. śaśi, candra, vidhus are three names for the moon, but do not indicate a class-nature 'moon-ness':

⁽iii) the bhūtadravya's are earth, water, fire, air, and ether, while the mūrtadravya's are earth, water, fire, air, and mind—therefore there would be confusion 'if mūrtatva and bhūtatva were sūmānya:

⁻⁽iv) universals $(s\bar{a}m\bar{a}nya)$ do not imply a class-nature 'universal-hood' $(s\bar{a}m\bar{a}nyatva)$, because this would involve infinite regress:

And similarly we must not say that the various universals are all universals in virtue of a universal nature 'universal-hood' (sāmānyatva) belonging to all universals as such.—And yet we do say that this, that and the other universal exist: and we do say that this, that and the other universal are universals. Does not this universalising function of thought imply a real universal 'Being' residing in universals, and a real universal 'universality' which makes them all alike universals?—Praśastapāda's reply amounts to saying that there is really no universalising function of thought implied in the assertion that the various universals exist and in the designation of them all as *universals*. Each is unique in its existence and in its nature: and the use of a common term,—'existence', 'universal',—does not here imply arv real community of character.

(2) This probably means, as Śrīdhara explains', that thought itself is the proof of the reality of the universal, when its reality is contested (vipratipannasāmān-yādisadbhāve buddhir eva lakṣaṇam: lakṣaṇam being glossed by pramāṇam). It is true that, on Praśastapāda's view, the universal is perceptible, and therefore perception is the means of knowledge (pramāṇa) by which we apprehend it. But, in dealing with an opponent who refuses to admit that the universal is given in perception, the

⁽r) ultimate differences (viśesa) have no common nature (viśesatva) for they would then forego their own nature, vince ultimate differences can have nothing in common:

⁽vi) finally, inherence (samavāya) cannot have inherence-ness resident in it, because there is no relation available by which such 'residence' could be explained,—for the supposition that inherence-ness resides in inherence by inherence involves infittite regress.

This arbitrary limitation of 'real universals' has parallels in Greek thought. Socrates protested against it.

^{&#}x27;Keith, ILA, p. 193, footno'e, says that VS I. ii. 3 is 'badly explained away' in this passage as meaning that the existence of universals is proved by thought. He thinks that the sūtra's do not teach a realistic view of the universal. But Prasastapāda, who certainly does maintain what Keith himself calls a 'rigid realism', uses this phrase buddhilakṣaṇa. And he can only have meant what Srīdhara says he meant. As to the meaning of the sūtra I. ii. 3, see above, p. 133.

appeal lies to the universalising function of thought, anuvitipratyaya. And it is in fact on this that Prasastapāda relies, in order to establish the reality of the universal.

- (3) The universal is not an effect, in this sense that it has a subsistence independent of the individuals in which it inheres (kāraṇānapekṣasrabhāvatra). A whole (avayavi) is an effect of which the parts in which it inheres are the constitutive cause (samavāyikāraṇa). But this cannot be said of a universal, which (unlike a whole) subsists before and after any individual in which it inheres.
- (4) A universal is not a constitutive cause, nor a non-constitutive cause (asamavāyikāraņa). It must however Totallowed to be an occasion or occasional cause (nimittakāraṇa): for it is the occasion of our thought of the universal.
- (5) This is explained under (1). Srīdhara however interprets sāmānyaviścṣa here as meaning specific or subordinate universal, aparajāti.
- (6) Universals are eternal because they endure while individuals arise and perish.
- (7) By the writer's own convention (svasamaya) the word 'thing' is not applied to universals.

Dinnāga's dialectic against this realistic view is preserved in a fragment cited in the Sarvadaršanasamgraha'. Prašastapāda does not reply to any criticisms of the kind which Dinnāga brings. But Prabhākara's doctrine seems to have similar criticisms in view. 'Though the Jāti or class-character is eternal, yet when a new individual belonging to that class comes into existence, what is brought into existence... is not the class-character, which is ever present, but only the relation (inherence) of the individual to that class-character.

Dinnäga, Fragment Q.

There is nothing objectionable in the 'production' of 'inherence', because inherence, according to Prabhākara, is not eternal (as held by the logician) 'i'. Prabhākara differs from Praśastapāda in refusing to admit sattā, 'Being', as a universal, apparently on the ground urged by the Bauddha critic as reported in the Sarvadarśanasamgraha. that there is no common form running through things so different as Mount Meru and a mustard-seed².

SECTION 11. RECOLLECTION, ATTENTION AND ASSOCIATION

In a passage in the Nyāya-sūtra 'which discusses memory it is suggested first that recollection is brought about by a specific kind of conjunction between manas and the soul. The traces of past experience inhere 'in' the soul, and are serially roused when manas makes contact with the part (pradeśa) of the soul concerned. See

¹Jhā, *PSPM*, p. 100.

²Srīdhara has two digressive passages in his comment on PBh here, viz., NK pp. 315-316, translated by Faddegon p. 502 ff., and NK pp. 11—13, translated by Faddegon p. 360 ff. The former deals with an objector who maintains that the universal is both different from and non-different from the particulars (bhedābheda), on the ground that if you take the universal in abstraction from the particular it has no content left to distinguish it from other universals. Universality, as such, only means inclusion—it will be the same in one universal as in another, and will not provide a content by which one universal is distinguished from another. Bare universality is an empty thought-form, deriving all its content from the particular: from which therefore it cannot be regarded as separable. But on the other hand the cow-hood which is thus inseparable from cow Blots and cow Spots and identical in both (for you cannot say 'Spots is a cow—and so Blots is not a cow), is at the same time differentiated from this or that particular—becauāe the cow-hood of Blots, being at the same time the cow-hood of Spots, cannot be identical with Blots herself: for Blots is not Spots, though both are cows (śāvaleyātmakasya gotvasya bāhuleyātmakatve siddhe śāvaleyād bhedo 'pi siddhyati. NK p. 315 l. 21).

By similar reasoning it is argued that the universal is not merely eternal, as the Vaišeṣika holds, but at once eternal and non-eternal (nityānitya), because it both survives and does not survive this and that individual. When Spots dies, her cow-hood dies also; but the cow-hood of Blots survives.

The other passage reviews various definitions of 'being', put forward in opposition to the Vaišesika doctrine of universal' Being'.

NS III. ii., 25 jõänasamavetātmapradešasamnikarsān manasah smrtyutpatter na yugapadutpattih—we do not have all our memories simultaneously because memory arises from contact of manas with a part of the soul in which the knowledge is inherent. In modern phrase, memory depends on attention to a particular sphere of experience: and we do not attend to everything at once. In Naiyāyika phrase, though ātman is all-pervading (ribhu), manas is atomic: so that, though soul as such is potentially all-knowing, attention limits the actuality of knowledge to one thing at a time. It is then suggested that manas has to go outside the body in order to make contact with the 'parts of the soul in which the knowledge resides'; but then the objection arises that in *the temporary absence of manas the function of maintaining bodily equilibrium would fail and a man would fall whenever he was occupied with attending to his memories. (We solve precisely the same difficulty by entrusting such function as maintaining equilibrium to 'subconscious process'). A suggested answer is that rapid return of manas (swift alternations of attention) may meet the case: but this is rejected on the ground that recollection may be a protracted process. But the truth is that manas always functions within the body (antah sarīravṛttitvād manasaḥ—NS III. ii. 26). Life itself, as Vātsyāyana says (ad loc.) is the contact of manas with embodied soul: and there can be no question of the manas going outside the body. It might also be asked: what sends it outside the body and directs it to a particular 'place' in the soul? If the soul directs the attention, then the soul knows already and there is no need of attention! And yet it cannot be by chance that attention hits the mark: nor yet can manas, the organ of attention itself know where to go-for it is not the knower (the soul is the knower): and so it seems impossible to suppose a specific mode of contact between manas and

soul (See NS III.ii.31—ātmapreraṇayadṛcchājñatābhis ca na samyogaviśeṣaḥ). But this line of objection is set aside by the sūtra, because it proves too much: for when a man's attention is concentrated on something else and he hurts his foot, his attention returns to his body and he is conscious of the hurt: but the objection just urged as to impossibility of directed attention would apply to this case, which is an unquestionable fact: and therefore that objection cannot be valid. (NS III.ii.32—vyāsaktamanasaḥ pādavyathanena saṃyogaviśeṣeṇa samānam—It is the same as the specific contact of manas with ātman which comes about through injury to the foot of a man whose attention is absorbed.)

The reason why we do not remember everything at once is that, besides the contact of manas and ātman and the existence of traces of past experience there are other conditions of recollection: namely, concentration (pranidhāna), and apprehension of associates of various kinds. These other conditions not being permanent but occasional, different recollections arise at different times. (NS III. ii. 33—pranidhānalingādijnānānām ayugapadbhārād ayugapatsmaraṇam.)

No attempt is made to reduce 'association' to laws, but $s\bar{\mu}tra$ 42 enumerates twenty-two conditions of recall, namely: concentration, context, repetition; signs (classified by Vātsyāyana as fourfold—the conjoined, as smoke is the mark of fire: the resident, as horns are the mark of a cow: the co-resident, as hand is the mark of foot, both being co-resident in the body: and the opposite, as the non-existent of the existent); marks, as a brand or

¹pranidhāna, nibandha, abhyāsa, linga, laksana, sādṛśya, parigraha, āśritasambandha, ānantarya, viyoga, ckahūrya, virodha, atiśaya, prāpti. vyaradhāna, sukhadnhkha, icchādvesa, bhaya, arthitva, kriyā, rāga, dharmādharma. (Vātsyāyana takes sambandha, in the compound aśrayāśritasambandha, as a separate head=relation; as a person living with the teacher reminds you of the teacher himself. This is arbitrary. I have followed Vātsyāyana's interpretation and used his illustrations in other cases; but he inay have ministerpreted the meaning of the sūtra in some cases here.)

an animal makes us think of its stable; likeness, as a picture reminds us of a man; possession, as property reminds us of the owner and rice versa; dependence, as leader and follower; immediate sequence, as in things which are to be done (each step reminds one of the next to be taken); separation, which makes a man think of the person from whom he is separated; unity of function, as one man who does anything makes us think of another who does the same thing; enmity, as of two rivals one reminds us of the other; excess, which reminds us of that by which the excess is generated (Vātsvāvana gives no illustration, and it is not clear what he has in mind); acquisition, which reminds us of the source from which the thing has been got; covering, as a scabbard reminds us •of a sword; pleasure-pain, which reminds us of their causes: desire and aversion, for a man recollects what he likes or dislike; fear, which makes us think of the source of the fear; suppliancy reminds us of things supplicated, such as food or clothing; action, as a chariot reminds us of the charioteer; love, for a man thinks of the woman he loves: merit and demerit, for as the result of merit there is memory of another birth and in this life retention of what has been read or heard; and as the result of demerit a man remembers the instruments of previously experienced pain (the explanation of this last rubric remains obscure).

The enumeration is interesting. It contains at least three different classes of 'conditions of recall', viz.—(1) concentration, context, and repetition. Concentration is defined as the application of attention (manaso dhāranām) through desire to remember; or, thinking of the marks of the thing to be remembered (susmūrṣitalinga-cintanam). Context is the connection of topics in a single passage. Repetition means a mental disposition or trace which is produced by repetition and is a quality of the soul (abhyāsajanitah saṃskāra ātmaguṇah).

- (2) Associated objects. The single head linga, in its fourfold meaning as interpreted by Vātsyāyana wili cover some at least of the other cases of association. Most of the cases would be classed as 'association by contiguity' in popular psychology. But 'likeness', and some cases of recall by 'similarity of function' would come under 'association by similarity.' 'Context' might be classed here under the general head of 'contiguous association', but implies a 'mental set' or attitude which makes it a class apart.
- (3) Moods or emotions or sentiments or feelings of the subject. Pleasure-pain, desire-aversion, fear, love obviously belong here. 'Separation' and 'suppliancy,' perhaps, as implying emotional moods which facilitate recall, are related to this head.

'Immediate sequence' implies conative unity, which relates it to 'context' and 'concentration'. 'Repetition' really belongs to a class apart, as being a condition of retention rather than an occasion of recall: and the mythological rubric of 'merit-demerit' (which would stand for inherited and instinctive disposition, in modern phrase-ology) should go along with 'repetition'.

CHAPTER III

INFERENCE

atha tatpūrvokam trividham anumānam, pūrvavac cheṣavat sāmānyato dṛṣṭam ca

tad idain hetūdāharaņayoh sāmarthyain paramasūksmam duḥkhabodhain paṇḍitarūparedanīyam

The general nature, and the varieties, of inference—The nyāya, or demonstrative method—The formulation of the syllogism, and the functions of its members—The canon of syllogism, or trairāpya—Classification of fallacious middle terms—Fallacious proposition, and fallacious exemplification—Syllogistic. The wheel of reasons, or nine valid and invalid types of syllogism—Syllogistic, continued. Purely positive and purely negative types of syllogism—'Uddyotakara's criticism of the interpretation of the trairāpya by the help of 'avadhāraṇa's'—Vācaspati Miśra's criticism of Dharmakīrti's doctrine of the 'samuccīyamānāvadhāraṇa'.

SECTION 1. NATURE AND VARIETIES OF INFERENCE

The earliest Indian formulation of inference which has survived is probably that contained in the Vaisesika Sūtra¹. Inference is there defined as laingikam jñānam, 'knowledge from a mark or sign'. This inferential mark—middle term—is of two kinds; dṛṣṭaṁ liṅgam on the one hand; and adṛṣṭam or sāmānyato dṛṣṭaṁ liṅgam on the other hand. The 'mark' functions inferentially in virtue of certain real relations in which things stand to each other, and which are enumerated in an aphorism of

¹Faddegon, VS, pp. 296 and 300, gives the following list of sūtra's bearing on inference: II. i. 8—10 and 15—17; III. i. 3—18; III. ii. 6—8; and IX. ii. 1-2 and 4.

the Vaisesika Sūtra (IX. ii.1). Very notable is the absence of all reference to the function of the example in inference, with one dubious exception (VS₁IX.ii.2); and the absence of any doctrine of the 'members' of the syllogism, which plays so large a part in the Nyāya The Nyāya Sūtra uses the word linga, but its regular word is *hetu*, reason or ground. stresses the function of the example, making inference turn on resemblance (sādharmya). And. of naming real relations as the basis of inference, defines the function of the hetu through general conception of 'probativeness' (sādhyasādhana). derived from likeness to examples (udāharanasādharm $y\bar{a}t)^{1}$. The doctrine of the Nyāya Sūtra probably represents a later phase of logical development than that of the Vaisesika-sūtra: and it stands for a different way of thinking, really, although the early syncretism of the two schools has obscured the initial difference in standpoint. The Vaiścsika-sūtra is interested in the inferential process as such, whereas the $Ny\bar{a}ya$ is interested in demonstration; the Vaiścsika therefore did not formulate a syllogism. which is essentially the form of argument rather than of inference; and he did not think of inference as an appeal to examples, but based it directly on the real relations of things. The *Naiyāyika*, on the other hand, was from first to last a tārkika, a disputant, and therefore thought in terms of argument; with the result that he attached exaggerated importance to examples, as the instrument for confuting an adversary. Had Indian logic developed on the basis of the Vaiśesika-sūtra it would have been a very different thing 'in all probability: and perhaps it would have given a truer account of the essential nature of inference.

The real relations on which inference is based are enumerated in VS IX.ii.1 as follows: "Knowledge

¹NS 1. i. 34.

through an inferential mark is where this is (a) effect of, (b) cause of, (c) conjoined with, (d) opposed to, (e) resident in, that '' (asyedam kāryam kāraṇam samyogi cirodhi samavāyi ceti laingikam). But there are clearly recognised two different kinds of the inference based on these real relations, according as the 'mark' is 'seen' or 'unseen' (the latter case is commonly described as 'seen from likeness'). These two types of inference (drstalinga and adrstalinga or sāmānyato drstalinga) are referred to in numerous sūtras (e.g. II.i.8, 10, 15, 16; III. ii.6, 7): and the principal examples of the application of the latter type of inference are the arguments proving the existence of a soul as the substrate of the psychical qualities and the existence of wind as the substrate of hot-These are two of the nine substances cold touch. (dravya) which the system recognises. They are both imperceptible, although their qualities are perceptible: and therefore their existence has to be established by an inference. But plainly it will not be an inference of the ordinary kind which establishes the imperceptible; and hence the necessity of admitting a special type of inference for the purpose.

This twofold division of inference is found also in other early schools, and may have been borrowed by them from the Vaiśesika. Sabara in his Bhāṣya¹ on the Mīmāmsā says: "Inference is of two kinds: that in which the relation has been experienced in perception (pratyakṣato-dṛṣṭasambandha), and that in which it is experienced from likeness (sāmānyato-dṛṣṭasambandha)".

Page 10 1. 12. Kumārila objects: "The division of inference into two kinds is impossible, because the connection between reaching a place and movement is seen by perception, no less than the connection between smoke and fire. It may be said that there is no perception of this connection in the sun: but neither is there perception of the connection between smoke and fire in the hill". Prasastapāda's distinction, referred to below, takes the force out of this objection.

· As an example of the former class Sabara gives the inference from smoke to fire: as an example of the latter the inference that the sun moves from the fact that it changes its place, on the basis of the experience that change of place on the part of a person is always preceded by movement (Devadattasya gatipurvikām deśāntaraprāptim upalabhya). Vātsyāyana gives the same illustration of samanyato dṛṣṭa inference. The point of the example is that the movement of the heavenly bodies is a thing beyond direct experience. But the original application of this type of inference is to something which transcends experience in a completer sense than this: and the Sāmkhya Kārikā (verses 5 & 6) is nearer to the original doctrine when it says sāmānyatas tu drstād atīndriyānām pratītir anumanāt "knowledge of things beyond the senses comes from sāmānyato-dṛṣṭa inference ". Gaudapāda is giving the right illustration when he says that the existence of prakrti and purusa is thus inferred.

The distinction then was originally a very real and important one. The Vaiścṣika-sūtra notes as a peculiarity of the sāmānyato-dṛṣṭa type that it does not lead to a definite or specific conclusion—sāmānyato dṛṣṭāc cāvi-, ścṣaḥ²—and this is perhaps the reason for the name.

It is also given in ${}^{4}Vy\bar{a}sa$ -bhāṣya on YS I. 7, though the two kinds of inference are not there distinguished; and by Gaudapāda in his comment on the $S\bar{a}mkhya$ $K\bar{a}rik\bar{a}$, as an example of $s\bar{a}m\bar{a}nyatodysta$ inference.

²Compare VS II., i. 9—17 with VS II. ii. 4—8. The passages are closely parallel, and certain sūtras are repeated in them, e.g. II. i. 15—17 compared with III. ii. 6—8. That the passages have explicit reference to one another is clear from III. ii. 5. Both passages note that the conclusion is indeterminate, avišesa. (Kumārila remarks that in that case the process is not inference—annmāna, but implication—arthāpatti; which is an acute and on his view of inference just, observation.)

The difficulty about the apprehension of wind $(r\bar{u}yu)$ for the Vaišesika is that it has not $udbh\bar{u}ta-r\bar{u}pa$, 'manifest colour'. A substance like earth is considered to be perceived because in addition to its specific property of odour it is also visible. But when a substance has no $udbh\bar{u}ta-r\bar{u}pa$, it is held that the substance, as such, is not perceived, but has to be inferred from its peculiar property.

given to it, partly. From psychical qualities you can infer the existence of a substrate: and you can adduce scriptural authority for saying that the 'soul' is this substrate: but the inference in itself tells you nothing as to the precise nature of this substrate, which, as thus inferred, remains quite indeterminate.

The distinction as thus understood is preserved intact by Vātsyāyana in one of the explanations which he offers of the term sāmānyato-dṛṣta in NS I.i.5; though it remains doubtful whether this was the real meaning of the sūtra. As an illustration of this sense of the term he gives the argument from psychical qualities to the existence of soul. His analysis of this kind of inference is worth quoting. " sāmānyato drstam nāma yatrāpratyakse lingalinginoh sambandhe kenacid arthena lingasya sāmānyād apralyakso lingī gamyate, yathecchādibhir ātmā, icchādayo guṇāh, guṇāś ca dravyasamsthānāḥ, tad yad eṣām sthānam, sa ātmeti." "The sāmān yato drsta interence is where, the relation between the Mark and the Subject not being perceived, an unperceived Subject is inferred from the . likeness of the Mark to something2: as the Soul is inferred through desire and the like. Desire and the like are qualities; and qualities are grounded in substances. That

It is because Locke has the same abstract notion of the substrate as a something-he-knows-not-what that he finds it possible to suggest that after all God might have "superadded to matter a faculty of thinking" (Essay Concerning Human understanding, IV, iii. 6). The Nyāya-sātra therefore argues from the specific nature of psychical qualities to a specific substrate, soul. See NS 111. ii. 58 ff.

^{**}Renacid arthena lingusya sāmānyāt. '' from the likeness of the Hark to something ''. But sāmānyāt should perhaps be translated 'from the Hark's community of nature with semething else '. For desire, e.e., are not morely like qualities. They are qualities. Yet they are qualities of so unique kind that, to use Prašastapāda's enlightening phrase, we may say there is 'yantajātibhedu, complete difference of kind, between them and those idysical qualities on the relation of which to (physical) substance the inference grounded.

¹⁸ *NBh* p. 19 l. 6 (on *NS* I. i. 5).

which is the ground of these qualities of desire and the like, is the Soul ".

The fifth aphorism of the Nyāya-sūtra substitutes a threefold division of inference for the twofold division which we have just been considering: and the meaning of the terms which it uses—pūrvavat, šeṣavat, and sāmān-yato dṛṣṭa was already obscure to Vāṭṣvāyana, who gives alternative explanations of them¹. If conjecture is permissible, it may be suggested that sāmānyato dṛṣṭa meant for the sūtra-kāra just what it meant in the Vai-śeṣika-sūtra; and that his innovation consisted in further subdividing the other class of inference, dṛṣṭa-liṅga, into two heads, pūrvavat and śeṣavat. As references are made in the Sūtra itself² to inference by elimination or residues or disjunction—pariśeṣānumāna—it is possible that śeṣavat has this meaning: and this is one of Vātsyā-yana's alternative explanations. In that case we may

^{*}Keith ILA p. 90 considers that NS II. i. 27—8 must be regarded as giving three instances of inference corresponding to the three types of inference enumerated in NS I. i. 5. If this be so, two of the three illustrations of inference which Vātsyāyana reads into the somewhat cryptic utterance of the Sūtrakāra do not correspond with the illustrations of the three types which he has given at I. i. 5: and it is not easy to bring what he says here into line with what he said there. The three instances here given are (1) the inference that it has rained from the flooded river, (2) the inference that it will rain from the ants running about with their eggs, (3) the inference that there is a peacock in the jungle, from the peacock-like scream. (Keith follows later commentators interpreting this last as inference of the coming of rain from the peacocks' cries). If the last is intended as a case of sāmānyata dṛṣṭa, then the meaning of this phrase has lost its distinctiveness: it would mean simply inference from resemblance.

The third example of sāmānyato dṛṣṭa given by Gaudapāda in his comment on the Sāmkhya Kārikā has a similar want of distinctiveness, viz. the inference that because the mange-trees are in bloom here, they must be in bloom elsewhere.

²NS III. ii. 40—parišesād yathoktahetüpapatteš ca. Vātsyāyana on this cites the same formula or vākya which he cited on I. i. 5 to explain šegavat:---

[&]quot;prasaktapratisedhe anyatrāprakangāc chisyamāne sampratyayah"

"if you dany various possibilities, and there is no possibility any
where else, you must come in conclusion to the remaining possibility."

We have proved that consciousness cannot belong to the five, material elements nor to manax: there is no other substance except ātman, southerefore it must belong to soul.

accept as the original meaning of pūrvavat Vātsyāyana's explanation and yathāpūrvam pratyakṣabhūtayor anyatara darśanenā'nyatarasyā'pratyakṣasyā'numānam, yathā dhūmena'gnih. "Pūrvavat inference is where, of two perceptible objects such as have been before experienced, the sight of one leads to the inference of the other which is not perceived; as fire is inferred through smoke". That is to say, pūrvavat inference comprises normal inferences of every kind (dṛṣṭa-linga); setting aside eliminative inferences which the sūtra-kāra has found it necessary to treat as a class apart, thereby innovating on the Vaiśeṣi-ka-sūṭra, which either had not noted these or had not regarded them as embodying any distinct principle. For all practical purposes the śeṣavat form is disregarded by the Naiyāyika himself.

The alternative explanations which Vātsyāyana offers of the three terms are that pūrvavat is inference from what preceded, that is from cause to effect, as when we infer that there will be rain, from clouds; śeṣavat is inference from what followed, that is from effect to cause, as when we infer that it has rained, from the swollen river: sāmānyato dṛṣṭa is as when we infer that the sun moves though we have never seen it moving, on the ground that when we see something in one place which we saw previously in another place there has always been movement preceding.

This is not further explained by Vātsyāyana; but he is quite well aware that it is different from the inference to the existence of the soul from psychical qualities. And, as has been said above p. 151, he gives the latter as an illustration of a different explanation of sāmānyato dṛṣṭa, which he analyses carefully.

The present explanation of sāmānyato dṛṣṭa agrees with Sabara's, and with Prasastapāda's, and is a natural development from the older view as found in the Vaiseṣika-sūtra. For a further account of it see the following paragraphs, pp. 158-159.

The difference between the two views may be expressed by saying that the adrsta-linga of the Vaisesika-sūtra is an inference about an unknown minor—apratyakse lingalinginoh sambandhe: while the sāmānyato-īrsta of Sabara and Prasastapāda is an inference to a relatively novel major.

Praśastapāda supplements the doctrines/of the Vaiścsika by those of the Nyāya, and develops new logical conceptions in his interpretations of both his sources. He accepts from the $Ny\bar{a}ya$ the doctrine of the example, and develops it into a canon of inference, as will be shown later. He supplements the Vaiscsika notion of the linga, and of the real relations which provide the basis of inference, by taking over the Naiyāyika notion of probativeness; and he attempts to make this notion more definite by conceiving all inference to rest on avinābhāva, or inseparable connection of characters. And in the light of this doctrine of inseparable connection he fixes the formula for a 'major premise', which really usurps the func-tion of the Naiyāyika's udāharaņa or statement of probativeness derived from likeness to examples. the section deals with Prasastanāda's statements relative" to the process of inference, the relation through which the inferential mark functions, and the two kinds of inference.

(i) The process or 'instrument' of inference

PBh.p.205 1.10. "The formula (ridhi) is 'Where there is smoke, there there is fire: and in the absence of fire smoke also does not occur'. In the case of a person who knows the connection in this way (prasiddhasamayasya), the conviction of fire arises, as the result of an undrubted experience of smoke and as the result of remembering the accompaniment of smoke by fire (sāhacaryānusmaraṇāt)".

The phrase prasiddhasamayasya is explained by Srīdhara as prasiddhāvinābhāvasya. It has been argued by Stcherbatsky that this is borrowed from Dinnāga by Praśastapāda, who has concealed or attempted to conceal his obligation by altering the phrasing! Dinnāga's

^{&#}x27;Le Muséon NS vol. v 1904. "Comme toujours Prasastapada a masqué son emprunt en changeant les termes" (p. 140 footnote). Keith ILA p. 105.

definition, as quoted by Uddyotakara is nāntarīyakārthadarsanam tadvido 'numānam,—' experience of a thing as inseparably connected is the instrument of inference, for a person who knows this inseparable connection '.-But the argument that Prasastapada borrowed his prasiddhasamayasya from Dinnāga's tadridah would prove too much. For a precisely parallel phrase occurs in the definition of inference given in Sabara's Bhāṣya²—anumānam jñātasambandhasya arśanād chadcśān arc 'samnikṛṣṭe' rthe buddhih. And it would not be suggested that Sabara, or the vrttikāra from whom he appears to be quoting here, is concealing his borrowing of Dinnaga's tadvidah by changing the phrase into jñātasambandhasya. It seems to have been common to the logic of the time to insert into the definition of the instrument of inference a proviso that the person drawing the inference should be aware of the relation between the terms which makes the inference possible.

The experience of smoke must be undoubted, because if you are not sure whether what you now see is smoke or mist your 'Mark' will be a fallacy of the variety designated by Praśastapāda 'tadbhāvāsiddha'. NK ad

loc., p.206 1.11.

Srīdhara points out that the instrument of the inferential conclusion is according to this passage the experience of the smoke (the middle term) together with the memory of the universal connection (vyāpti). This he says leaves no room for the lingaparāmarśa (in the form vahnivyāpyadhumavān ayam parvatah—in this hill there is smoke-pervaded-by-fire)—which according to the teaching of Uddyotakara is the instrument of the inferential conclusion: and the statement of which is assigned as the special function of the upanaya or fourth member of

^{**}NV p. 56 l. 14. Vācaspati ad loc. (NVT p. 120 l. 8) does not attribute this to Dinnāga: but the attribution is implied at p. 127 l. 1 and again l. 12. See Dinnāga, Fragment G.

*p. 10 l. 11 in the Bibl. Ind. edition, 1889.

the syllogism, as distinguished from the statement of the linga as a property of the paksa which is commonly assigned as the function of the second member of she syllogism (paksadharmatā).—Srīdhara says that the Vaisesika has no use for this 'dvitīyalingaparāmarśa'; since the conclusion is made possible lingadarśanavyāptismaranābhuām eva-simply through seeing the Mark and remembering the connection. He adds that the upanaya or fourth member of the syllogism does not become functionless on this account: for this member is put forward, in 'inference for another', for the purpose of conveying paksadharmatā—the residence of M in S—which has not been conveyed by the other members (avayavāntarair apratipāditasya paksadharmatvasya pratipādanārtham parār $th\bar{a}num\bar{a}ne$ tasyopanyāsāt. NK p. 206 l. 15)2.—For, on the Vaisesika view, the function of the apadesa or second member is the bare statement of the linga, and not the assertion that it belongs to the subject (paksadhar $mat\bar{a})^3$.

(ii) The relation on which inference is grounded

PBh. p.205 1.14. "Thus the Mark is something
inseparably connected with something
else in every time and place (sarvatra deśakālāvinābhūtam
itarasya lingam). The mention of the causal relation and
other relations as grounds of inference in the Vaiśeṣika

Sūtra (IX.ii.1) is by way of illustration and is not meant
as an exhaustive statement of the grounds of inference
(nidarśanārtham kṛtam nāvadhāranārtham): for we find
other relations besides those mentioned (used as grounds
of inference). Thus when we hear the officiating priest

It is usually called trtīyam lingajūānam,—the first being the previous experiences of the 'Mark' which lead to apprehension of the universal connection (vyāpti); the second being the paksadharmatājūāna: and the third the lingaparāmarša. See Tarkabhāsā p. 42 (Pandit Reprint).

²On the interpretation of this passage, see below, pp. 170—172.

³See the *Tarkabhāṣā* p. 36 ff. The *Nyāyapradīpa* comment p. 36 states the views of the *Vārtikakāra*, of the *Tattvacintāmani*, and of *Udayana*: and on p. 42 refers to the present passage of the *Nyāyakandalī*.

repeating the sacrificial formula we infer the presence of a sacrificing priest, who is concealed from view: the rising of the moon is the inferential Mark from which we infer the rise of the sea and the blooming of the lotus: and calm waters in the autumn are the Mark of the rising of the star Canopus¹.

"All such cases are comprehended in the words 'asyedam', 'this is related to that', of sūtra IX.ii.1, for these words refer to relation in general (not to this or that particular type of relation such as causality or identity)". asyedam kāryam kāranam samyogi virodhi samavāyi cetr laingikam. Prasastapāda would interpret this: "Inferential knowledge arises where 'this is related to that' as effect, cause, conjoined, opposite, constitutive or inherent, etc. " The view of the sūtra against which he is arguing interprets it as meaning that the grounds of mference can be reduced to a limited number of real relations. Now this corresponds with the view which Dinnaga and subsequent Bauddha logicians took of inference. except that they reduced the real positive relations, on which they supposed all inference to be grounded (apart from inference from non-perception, anupalabdhi), to the ewo real relations of causality and identity (kāryakāran-, auhāva and tādātmya), in place of the rather incoherent nst given in the Vaiścsika Sūtra. Praśastapāda's argument here is therefore rightly connected by Sridhara with the controversy between the Bauddhas and the orthodox school as to the real nature of inseparable connecποη (avinābhāva) and the means by which we arrive at knowledge of it (vyāptigrahopaya, to use the phrase of a

Prasastapāda's illustrations are not all favourable to his point, for it is easy to read the causal relation into some of them. Later logic manuais give the illustration of inferring colour or form from taste—presumably as when tasting a fruit in the dark. TB comm. p. 88—tūdūtmyatadutpattubhyām evāvinābhāva iti saugatamatam. tan na. rasādinū rūpādyanutānasya sakalajanasiddhatvāt. na hy anayok kāryakāraṇabhāvo na va tādūtmyam iti.

later period). But there is nothing to show that Prasastapāda had in view the doctrine as taught by Dinnāga. He does not mention Dinnāga's twof¢ld classification of relations.

(iii) The two types of inference—dṛṣṭa and sāmānyato dṛṣṭa

PBh. p.205 1.19. "The inferential mark is of two kinds: that which is directly experienced, and that which is experienced from likeness (dṛṣṭam, sāmānyato dṛṣṭam ca). Where there is complete identity of kind between the property as known in the example, and the property as it is to be proved (prasid-dhasādhyayoh)², the inference (anumāna) is of the former kind (dṛṣṭa); for instance, from the experience of just a dewlap (sāsnāmātra) in nothing but a cow (gavy eva), we infer in another place also that a creature is a cow from seeing just a dewlap."

¹Srīdhara has a long egression on this controversy, NK pp. 206—210. The passage is translated by Faddegon, pp. 458—465. See also Sarvadar sanasamgraha, chapter co the Band-dhas, first page—Both Śrīdhara and Mādhavācārya take as the text for the discussion the often-cited couplet from Dharmakīrti:—

kāryakāraņabhārād vā svabhāvād vā niyāmakāt avinābhāvaniyamo 'darśanān na na darśanāt.

[&]quot;The cow-hood which is to be proved" $(s\bar{a}dhya)$ is precisely similar to the cow-hood as experienced in the cows which constitute the example or sapakṣa (prasiddha). As Srīdhara puts zc: gotvajātivišiṣtāyām eva govyaktau sāsnopalabdhyā sampraty api gotvajātivišiṣtāyām eva govyakter anumānam. (NK) p. 212 l. 7).—The example is that given of the drṣta linga in VS $\overline{11}$. 1. 8.

P. 206 l.\frac{1}{2}.

ence in kind between the property as experienced and the property to be proved, the inference is from concomitance of the general nature of the property to be inferred with the general nature of the inferential mark (lingānumeyadharmasāmānyānuvṛttito 'numānam)\frac{1}{2}: and this is sāmānyato dṛṣṭam.

"For example, finding from experience that the activity of farmers, merchants, and officials has a result (phalavattva), we infer that the activity of hermits has a result too, although we cannot point to the motive as something that has actually fallen within our experience (drstam prayojanam anuddisya)."

The distinguishing character of the sāmānyato dusta argument given by Prasastapāda is that we are arguing from one sort of activity which we have experienced to another sort of activity of which we have no experience. In the drstānumāna on the other hand we are arguing from one cow to another cow, i.e. from one thing to another thing of exactly the same sort. We have never experienced the motives of hermits' activities: but we have experience of the motives of worldly men's activi-* ties: and we extend the connection between activity and • motive which has been experienced in one class to other sorts of activity, in which such connection has not been experienced. The sāmānyato drsta inference is much more constructive or productive, much less purely reproductive or repetitive, than the drsta inference. The former is an inference to the relatively novel, while the latter deals merely with repetitions of the old. sāmānyato drsta looks less cogent in form, but is more like real and valuable inference in fact.

The meaning is that the particular form in which the P has been experienced (prasiddha) is different from the particular form in which P is to-be proved (sādhya). P in the latter form has never been experienced with M

P. Bh. p. 206.

"This is inference for oneself (svaniścitārtham anumānam)."

The distinction between inference as a thoughtprocess in one's own mind, and that process expressed in words for communication to others, is an obvious one. and is already contained in Vātsyāyana's distinction between anumana on the one hand, and nyaya or sadhakavākya or pañcāvayavopapannavākya on the other hand. But in defining the avayavas, or Members of the vākya, the Sūtrakāra does not keep the two things distinct, his definitions being sometimes rather definitions of aspects of the inferential process (premises in 'inference for oneself'), than definitions of those propositions (verbal expressions of premises) which alone can form part of a vākya, a probative statement. This, as we learn from Uddyotakara and Vācaspati Miśra, exposed ** him to the criticism of Vasubandhu: and these criticisms would perhaps draw attention to the necessity of making more explicit than Vātsyāyana had done the distinction between inference in itself and the expression of it in words. It does not seem, in the light of these considerations, that there can be any question of priority

^{*}Keith ILA pp. 106-7 "Yet a further proof of the dependence of Prasastapāda on Dinnaga may be derived from the fact that the distinction of reasoning for opeself and reasoning for another . . . is present in Dinnaga, and is expressly stated (NBT pp. 46-7) to have been introduced by him . . . Prasastapāda's debt to Dinnāga in this regard is clear, despite his slight change in terminology (spanisetlārtha for spārtha), which may legitimately be attributed to a desire to conceal his borrowing, for he retains in practice, if not in theory, verbal testimofy as a separate means of proof, while adopting the principle of distinction between reasoning for oneself and reasoning for another, which in truth rests on the fact that verbal testimony is no true means of proof at all ". (I find no such statement in NBT pp. 46-7. The reference is perhaps wrong.)

I have deliberately rendered svaniscitärtham in what seems to mera wrong way here, making it identical in meaning with svärtha. But it should probably be "inference in which the object or conclusion is established (inferred) by oneself".

²NV p. 139 l. 14. The criticism is etasmin arayaratraye evanlakşanenopapādite tesām trayo durvibhāvāh. NVT ad loc. p. 203 (last two fines) says: atra Subandhunā pratijūādayas trayo 'vayavā durvihitā Akṣapādalaksanencty uktam. See Fragments from Dinnāga, section 13.

of discovery as between Prasastapada and Dinnaga. Nor is it clear that there is any connection between the recognition of the distinction between svārthānumāna parārthānumāna, and the denial of the claim of verbal testimony to be a separate source of knowledge. It was inevitable that all schools should draw the distinction between inference in the mind and inference expressed in words,—whether or not they admitted Testimony as a pramāna or instrument of valid cognition.

SECTION 2. THE 'NYAYA', OR DEMONSTRATIVE METHOD

The formulation of the five-membered statement² is apparently the achievement from which the Nyāya system took its name. The word nyāya meant 'method': and the five-membered statement became the method for the Naiyāyika—paramo nyāyah, as Vātsyāyana calls it in the brief account of it given in his comment on the opening sūtra3. Other 'nyāyas', or methods of debate and argument, had been prevalent in earlier schools, and Vātsyāyana himself speaks of certain naiyāyika's or teachers of method—for it is a mistake to take the term bere in its later sense of teachers of the Nyāya system who reckon ten members in the 'statement' by including, as parts of the method, the desire to know, the doubt. the belief in the possibility of a solution, the purpose, and the dispelling of the doubts. The second and the fourth of these are enumerated among the topics or 'cate-

^{&#}x27;Keith, ILA, pp. 107-108.

Nidyābhīṣaṇa points out that Nārada is described in the Mahā-bhārata (sabhāparran, 5 l. 5) as one who understood the characters which make the statement endowed with five members valid, and the characters which make it invalid—aācāvayavayuktasya vākyasya gunadosavit. HIL n. 498. This is certainly a reference to the 'nyāya' as formulated in the Nyāya Sūtra.

^{*}NBh. p. 5 l. 5.
*NBh. p. 39 l. 9 daśāvayavān ekc naiyāyikā vāliye samcakṣate,

jijūāsā samšayah šakņaprāptih prayojanam samšayavyudāsa iti.
"So Keith renders the doubtful term šakyaprāpti, ILA p. 86. Jbā (transl., I. 316) renders 'capacity to accomplish what is desired'.

gories' of the Nyāya Sūtra, but not as 'avayava's' or members of the 'statement'. These five additional 'members' are certainly phases in the psychological process of reasoning; but they have no place in a logical analysis of argument: and Vātsyāvana, in rejecting them on the ground that they are not organic parts (ckadcśa, bhāga, anga) of the probative statement (sādhakavākya) as not being instruments in proving the thing' (asādhanam arthasya), is recognising the distinction which we should make between the properly logical and the merely psychological factors in the reasoning process.

It seems clear that the lopping off, on this principle, of the superfluous or non-logical members of the 'nyāya'. was in fact a very important achievement. It marks the transition from a pre-logical to a truly logical stage of reflection upon the process of reasoning, and fairly entitles the school which took this step to be regarded as the founders of the syllogistic art in India. The carlier nyāya' was a stereotyped formula for the conduct of debate and cannot claim the name of syllogism. It was a methodised debate rather than a formulation of the process of reasoning: and the 'logic' of the period was not logic at all, but a conventional methodology of discussion. This is clear from an examination of the arguments in such works as the Kathāvatthu, or from a consideration of the ten-membered 'syllogism' of the early Jaina logic as set out by Bhadrabāhu'.

 $^{^{1}}Samsaya$ figures also in the lists of the tantrayukti's . The sixteen categories of the $Ny\bar{a}ya$ are no more than the tantrayukti's of that system.

 $^{^{2}}NBh$ cn NS I. i. 32.

[&]quot;In many contexts (as here) artha can be rendered 'conclusion'. Cf. svaniscitārtham anumānam = an inference in which the conclusion is inferred by oneself.

⁴Vidyāblūīsana *HIL* p. 166=*MSIL* pp. 6—8. The ten-membered syllogism spoken of by Vātsyāyana is quite different from this.

The Kathāvatthu uses certain technical terms such as niggaha, patiūña. upanaya, niggamana, opamma: but not as the Nyāya does.

The 'nyāya' in its origin, was not a 'syllogism'; but it becarbe such as soon as it came to be regarded as the verbal expression of an inference, as Praśastapāda and Dinnāga regarded it. According to these writers and all the later schools, the nyāya was simply the regular expression, for the information of another (parārtha), of an inference which one has drawn for oneself (svārtha-, or svaniścitārtha-, anumāna). And it is at this stage that the question begins to arise, why should inference for another have five members? It seemed obvious that 'inference for oneself' implied in addition to the conclusion only two factors, corresponding to the two premises¹ of the Aristotelian syllogism. What factors in inference are expressed by the other two members² in the nyāya?

Either the *hetu* or the *upanaya*, on the one hand, and either the $pra_{ij}\tilde{n}a$ or the *nigamana* on the other

hand, would seem to have nothing to express.

•The reason why the so-called Indian syllogism, the $pa\tilde{n}c\bar{a}vayava-v\bar{a}kya$, had five members, is partly to be found in its history. The earlier $ny\bar{a}ya$'s were not syllogisms, nor even $pararth\bar{a}numana$, i.e., communication of inference to another. They were conventional forms of debate, and the number of the 'members' depended on the convention of a particular school: there was no logical reason why the number should be ten in the earlier methodology? and perhaps it was not a purely logical reason which gave the $ny\bar{a}ya$ five members in the $Ny\bar{a}ya$ $S\bar{u}tra$,—rather than three. The two additional members may well have been a legacy from the earlier

^{**}Iingadarśana or paksadharmatā, and ryāptismarana. But Uddyotakara, followed by the later school, edds parāmarśa, i.e. the realisation that S is M-which is P, as a sort of third premise, expressive of the unity of the other two factors, and immediately causing the inferential knowledge that S is P. Thus a function is found for the upanaya, as the expression of this parāmarśa.

^{* &}lt;sup>2</sup>See section 3 infra pp. 167 ff. for the Indian syllogism and its members.

methodology. It is noteworthy that the author of the Nyāya Sūtra does not connect his doctrine of the 'members' with the topic of inference; and Vātsyāyana makes it plain in several passages that he conceived 'the method ' or the five-membered statement as something more than, though inclusive of, inference. identifying nyāyavidyā or nyāyaśāstra with the ānvīkṣi $k\bar{\imath}$ of the earlier literature, he asks: "What is this nyāya? Nyāya is the enquiry into things by the instruments of valid cognition (pramānair arthaparīkṣanam nyāyah). This enquiry or anvīkṣā consists in inference relying on perception and testimony: it is the subsequent investigation (anvikṣaṇam) into something apprehended (*iksitasya*) by perception and testimony. and the science which works with this anvīksā is ānvīksikī that is to say it is $ny\bar{a}yavidy\bar{a}$ or $ny\bar{a}s\bar{a}stra$ —the science or art of logical method¹. At a later point in the comment on this same sūtra2 he attempts to identify each of the four members of the pañcārayavavākua (excluding of course the conclusion) with one or other of the four recognised instruments of cognition, asserting that "the Proposition is testimony, the Reason is inference, the Example is perception, the Application is analogy. Conclusion sets forth the competency or cogency of all of these acting unitedly on a single object. This is the prime method, the 'paramanyāya' ".—He speaks precisely the same effect in another passage's. "In

 $^{^{1}}NBh$. p. 3 II. 14—17. He adds: yat punar anumānam pratyakṣā-gamaviruddham, nyāyābhāsah sa.

²NBh. p. 5 ll. 1 to 5 tesu (sc. avayavesu) pramānasamavāya āgamāle pratijūā, hetur anumānam, udāharaņam pratyaksam, upanayanam upamānam sarvesām ekārthasamavāye sāmarthyapradar sanam nigamanam iti. so 'yam paramo nyāya iti. (There should be a stop after pramānasamavāyalı, and no sandhi.)

^{*}NBh. p. 44 ll. 10—16. on NS I. i. 39. Dr. Jhā's translation of this passage is misleading. He takes sambhavas tāvat šabdaviṣayā pratijnā as one clause—" in the inference bearing on sound the Proposition sound is non-eternal comes under Probability". This is impossible, seeing that the Naiyāyika did not admit sambhava to be a pramāna.

the statement which is the aggregate of the members (i.e. in the pañcāvayavavākya) the various instruments of cognition co-operate $(sambh\bar{u}ya)$ to establish the thing, as the result of their mutual interconnection. The cooperation (sambhava) is as follows. The Proposition has a subject-matter which belongs to credible testimony (śabdaviṣayā pratijiñā). Owing to the fact that such testimony is (sometimes) opposed by perception and inference, and because the statement of anyone but an inspired seer cannot stand alone (as valid independently and in its own right), there is inference, in the form of the Reason, as the result of seeing similarity (to the present case) in an example. . . The Example has a subject-matter which belongs to perception (pratyaksavisayam udāharaņam), since it is by something scen that what has not been seen is established (in the inference). The Application is analogy, since it applies (the example) in the form 'so is this '(upamānam upanayaḥ, tathety upasamhārāt).....'

In these passages Vātsyāyana clearly treats the five-membered statement as a method $(ny\bar{a}ya)$ through which all four instruments of knowledge are brought to bear on a single object. And he clearly thinks of it as more than inference or the expression in words of inference: for the inferential element is identified with only one member, the hetu or reason.—But inference cannot be abstracted from perception, at least; and this fact is recognised in the $s\bar{u}trak\bar{a}ra$'s definition of inference as $latp\bar{u}rvaka$, dependent on perception. And since the perception which it implies can hardly be confined to the present case (SM), this really implies recognition of similarity to previous examples $(drst\bar{a}nta \ XM)$ — and thus 'analogy' is also implied. Therefore, except for the element of testimony which Vātsyāyana reads into the Proposition (an indefensible position, unless we are prepared to treat the 'nyāya' as a method which is

valid only when it confirms that for which we already have authoritative testimony), an analysis of what is implied in inference, anumāna, would have led to some such formulation of inference as the 'nyāya' which Vātsvāyana here treats as something more than inference. Whatever then may have been the intention of the sūtrakāra, it was inevitable that the five-membered statement should be regarded as 'syllogism', i.e. as the formulation of anumana. It is in fact in many ways an admirable formulation of that class of inference which is based on a previous induction. But the five-mem bered formula was influenced by its historical origin in a nyāya' which was methodological rather than logical and its structure must be regarded as in part vestigial rather than determined by the requirements of logical analysis². Western logic might be inclined to for mulate the argument from examples thus:-

1. X (the example) Y (the negative example) is M. is non-M.

2. X (the example) Y (the negative example) is P. is non-P.

- 3. Therefore M is necessarily P.
- 4. But S is M.
- 5. Therefore S is P.

This 'deduction combined with superficial induction', happens to have five members; but they are not the five members of the Indian' syllogism'; which combines the first three clauses of the above formula into a

See Note on the Indian Syllogism, in Mind, NS Vol. XXXIII. No. 132.

Caraka seems to be thinking of inference in the way in which these passages of the Nyāyabhāsya think of the 'nyāya', when he says that anumāna is dṛṣṭānto hetubhir yuktah. For he uses hetu in the sense of pramāṇa. But his account is that of the layman, and should not be taked too seriously. Carakasamhitā, vimānasthāna, chap. viii, p. 300.

^{*}So Faddegon characterises the 'Indian Syllogism'. But the 'there fore' in the third statement here is entirely contrary to Indian conceptions which never treat* induction 'as an inference.

single member, namely, the 'Example' (udāharana or nidarśana), and therefore is still left with a superfluity of two members, viz., either hetu or upanaya, and either pratijñā or nigamana. This superfluity is inherited from the time when the 'nyāya' was a method of debate and not yet a syllogism: and, in the case of the Nyāya school, the convention of five members may have been fixed (as is suggested by these passages of the Nyāya Bhāṣya) by a desire to equate the four 'premises' with the four pramāṇas.

SECTION 3. THE SYLLOGISM, AND ITS MEMBERS

Praśastapāda's account of the 'syllogism' ($par\bar{a}r$ -thānumāna) and its members is as follows.

Definition of parārthanumāna

PBh. pp. 231—252. "Inference for another is the communication, through the five-membered statement, of a thing ascertained for oneself. The communication is to persons who are in doubt or are of a contrary opinion or are ignorant; and is to be understood as taking place through the five-membered statement and in no other way $(eva)^1$.

The Five 'members'

(i) Proposition

"The Members, then, are the Proposition (prati- $j\tilde{n}\bar{a}$), the Reason (apadeśa), the Exemplification (nidar-

The evakāra is meant says Srīdhara, to exclude the views of those who teach a two-membered $v\bar{a}kya$, and those who teach a three-membered $v\bar{a}kya$.

His comment here embodies a long digression on the controversy between the anvitūbhidhūnavāda and the abhihitūnvayavāda, which is translated by Faddegon pp. 492—491. See Jhā, PSPM p. 62, who cites Cowell's note on SDS (iransl. p. 202).

sana), the Application (anusamdhāna), and the Conclu-

sion $(pratyāmnāya)^1$.

Among these, the Proposition is a setting forth of a probandum² which is not contradicted (by any instrument of knowledge). That is, it is the pare setting forth, with a view to communicating that to which the Reason applies, of a Subject as qualified by the Property the knowledge of which it is desired to convey (pratipipādayiṣitadharmaviśiṣṭasya dharmiṇaḥ). For example: 'Wind is a substance'. . . 3.

(ii) The Reason

"The Reason is the mentioning of the Mark (or middle term, M.). That which accompanies the probandum' is found in its general nature (sāmānyena). everywhere in what is like the probandum, and is always absent (asad eva,—absent only, and never present') in everything opposite to the probandum, is called a Mark: and the mentioning of this is the Reason⁸. For example, 'because of possession of movement'

^{&#}x27;It seems best to give the renderings which have been used for the corresponding Naiyāyikā terms—pratijāā, hetu, udāharana, upanaya, nigamana.

²anumeya. It has the usual double meaning—neither S nor P, but SP: This is clearly stated in the next clause—the probabdum is the Subject, S, qualified by the Property, P: or the sadhyadharmin qualified by the sadhyadharma.

The rest of the paragraph deals with the Fallacious Propositions,

and is translated below, p. 216.

⁴anumcya. Here the meaning is doubtful, but I think it stands for sādhyadharmin, S, rather than for sādhyadharma, P. See below, pp. 185 ff. The particular smoke on the hill is not present in the hearth: but smoke as such, dhumatvena,—in its universal nature—is present.

I cannot explain sarvatra 'everywhere': the next clause states that M need not be found everywhere in XP, cases like S (sapakṣa).

i.e. in the vipaksa X non-P.
*apadeśa. The word, as it happens, is etymologically identical with the Greek apodeixis: and the Vaišesika use of it has some resemblance to Aristotle's use. It figures in the lists of tantrayukti's, but in different senses. Kantilya understands by it merely 'citation'-evam asav aha ity apadesah. Susruta gives it a meaning closer to Vaisesika usage: anena kāranena itv apadesah; yathāpadisyate madhurena na slesmā 'bhivardhate-' apadesa consists in assigning a cause, e.g. by taking madhura the accumulation of phlegm is prevented "...

or 'because of possession of qualities' (wind is a substance). Here the Mark is present in the probandum; is found in what is like the probandum—'possession of qualities' being found in everything like the probandum, 'possession of movement' in not-all (i.e. some) things like the probandum'; and is—in both cases—always absent in that which is not substance. Therefore the mentioning of these is the Reason. . .'

(At this point occurs the long passage dealing with Fallacious Reasons, which is translated below, p. 199.)

(iii) The Exemplification

"The Exemplification is of two kinds, through likeness and through unlikeness. Of these, exemplification through likeness is the showing (darśana) of the fact that the Mark, in its general character, is constantly accompanied by the probandum in its general character (anumeyasāmānyena lingasāmānyasyānuvidhānadarśanam): for example, 'what possesses movement'is seen to be a substance, as an arrow' (yat kriyāvat tad dravyam dṛṣṭam, yathā śarah).

"And exemplification through unlikeness is the showing of the absence of the Mark where there is difference from the *probandum*: for example, 'what is non-substance does not possess movement,—as Being (sattā)'

(The next paragraph deals with Fallacious Exemplifications, and has been translated below, p. 220.)

²Thus both forms of valid syllogism are exemplified—supakṣaikade⁵avṛtti and sapakṣavyāpaka. See below, p. 188.

• ²See note 5 above, p. 168.

^{**}See note 5 above, p. 168.
**anuvidhāna means 'obedience', 'acting conformably to'. Srīdhara glosses by sādhyasādhanayor anuşamaļi.

⁴anumeya here clearly stands for sādhyadharma. P.

⁵The word dṛṣṭa is regularly used both by Votsyāyana and Praśastapāda in the formulation of the udāharaņa or nidaršana. Cf. dṛṣṭānta and
aidaršana. The word seems to underline the appeal to experience,—as
Vātsyāyana does when he says pratyakṣaviṣayam udāharaṇam dṛṣṭenādṛṣṭasid
theh.

(iv) The Application

"The Application (anusamdhāna) is the bringing to bear (anvānayana) on the Subject (anumeya) of the Mark, in its general nature, as seen $(drsta)^2$ together with the Property (anumeya), in its general nature, in the Example. That is to say³, the Application is the statement through which is applied to the Subject the Mark, which has hitherto been mentioned as property of the Subject (anumeya dharmamātratvenābhihita), so that its competency to prove the conclusion was before unapprehended,—but in its general character (i.e. in its aspect as a universal or common character) is now seen in the Example as accompanied by the Property to be proved (sādhyadharma): 'and even so is wind possessed of movement' (tathā ca vayuḥ kriyāvān iti)."

Note.—Prasastapada is trying to find for the fourth member of the syllogism a function distinct from that of the second, so as to justify its existence as a separate member. And his solution appears to be (though he does not yet use the term parāmārša), that, whereas the Reason states that S is M (paksdharmatā, dvitīyalingajñāna), the Application states that S is M-which-is-P (parāmarša tṛtiyalingajñāna).

Srīdhara however gives a different explanation. argues that the second member of the syllogism merely mentions the hetu or reason in itself, and does not state that it is a property of the subject-heturacanani hetusvarūpamātrani kathayati, na tasya pakṣadharma!ām. The members of the five-membered statement are answers to the successive phases

^{&#}x27;anumeya is here used in two different senses-first as P and then as S-in one and the same clause. Similar cases of the ambiguous use of sādhya in a single clause could be quoted from Vātsyāyana.

²See note 5 on preceding page.

³Prasastapāda kas a habit of, so to say, commenting on his own utterances, which sometimes leads one to suspect that he is citing and commenting on an earlier 'vārtika'. Uddyotakara has this mannerism (if that is all it is) in an even more marked form, so that in e.g. Dr. Jha's translation it will often be noticed that two consecutive sentences say exactly the same thing. Sridhara says : svoktam vivrnoti.

of the hearer's 'desire to know' (ākānkṣā, jijnasā). After the mention of the thing to be proved the hearer first desires to know what the instrument of proof is $(s\bar{a}dhane\ bhavaty\ \bar{a}k\bar{a}nks\bar{a}):\ and$ desire this fied by bare mention of the middle term. middle term or reason is known the hearer desires to know what constitutes it a middle term or reason, i.e. he desires to know its cogency or competency (sāmarthyajijnāsā): and this is satisfied by (a) the statement of inseparable concomitance (avinābhāva) in the third member; and then-in response to a further phase of the hearer's desire to know by (b) a statement, in the fourth member, that S is M-which-The latter statement constitutes the pakṣadharmatā, according to Sridhara: so that he denies the necessity of pakṣadharmatā in the usual sense (S is M), and identifies pakṣadharmatā with what Uddyotakara calls parāmarśa1.

It is further objected (2) that if parāmarśa plays no part in inference for oneself, then the Application' or fourth member of the 'syllogism' will have nothing to express, and so will be without a function. The answer given is that, in the case of inference for another the residence of M in S (pakṣadharmatva) has not been set forth by the other members, and that the application has the function of stating pakṣadharmatva.

That is, in the case of svārthāhumāna there is no need of a separate movement of thought corresponding to the statement that S is M-which-is-P because the actual experience, here and now, of the M, determines the reference of M to the here-and-now S. But in the case of parārthānumāna, M is not experienced here and now (i.e. in S); but barely mentioned in the second member. Its application to S must therefore be definitely stated—and this is done in the fourth member; but as stated now, in the fourth member, it is a statement, not merely that S is M, but that S is M-which-is-P.

The obscurity of the passage is partly due to the phrase dvitīyalinga-parāmarša. In the later terminology dvitīyalingajūāna is paksadharmatā, while the parāmarša is called trtīyalingajūāna. Srīdhara (I think) refuses to make the distinction between paksadharmāta and parāmarša; so that the dritīya and trtīyā-jūāna become identical for him.

This helps to explain a passage in Spīdhara's comment on PBh p. 205 (NK p. 206 ll. 12 to 16). He says there that in the case of inference for oneself the only factors necessary to the inferential knowledge of P are the experience of M, and the remembrance of the necessary connection between S and bi-lingadarsanavyāptismaranābhyām evānumeyapratītyupapattih. It is objected (1) that this leaves no room for the "dvitīyalingaparāmarsa" without which the thought of P would not have reference to a particular time and place, because the thought of P (on this view) immediately follows on the act of remembrance. The answer given is that the experience of the M determines P to a particular time and place (na ca smṛtyanantara-hācitvād anumeyapratītir aniyatadigdesā syāt, lingadarsanasya niyāmakatvāt).

Praśastapāda's statement that in the second member of the syllogism) "the competency of the reason to prove the conclusion is as yet unapprehended" is brought into line with this account by saying that this compentency consists in (a) positive and negative concomitance, and (b) "pakṣadharmatā"—the competency is then unapprehended in the second member because the two elements are stated subsequently in the third and fourth members.

This account is perhaps rendered plausible only by the fact that in Sanskrit the second premise (the Reason) is stated in a single word, instead of in a clause as in English—the causal ablative of an abstract noun taking the place of a causal clause. If we substitute for the word kriyāvattvāt the clause 'because it possesses movement', it becomes obvious that the 'bare mention of the middle term' is in fact impossible,—we cannot mention it without referring it to the Subject: that is to say the statement of 'pakṣadharmatā', i.e. a statement that S is M¹.—Srīdhara's position is impossible simply because a member of the syllegism must be a proposition. He quotes, however the authority of the Nyāyabhāṣya in support of his account (NPh p. 44 l. 17 asati hetau kasya sādhanabhāvaḥ pradarsyate². NK p. 250 l. 23).

^{&#}x27;Srīdhara has difficulty in explaining Prašastapāda's phrase annucyadharmamātratvenābhihita (which clearly implies pakṣadharmatā) in such a way as to suit his own account. 'Hetuvacanena lingam vastuvyāvṛttyānumeṇe 'sty' etāvanmātratayā hetutvenābhihitam, na tu dharmini lasya sadbhānaḥ kathitaḥ ''. '' By the Statement of the Reason the mark has been mentioned as the reason only so far forth as it is in the probandum (P in general, nP) to the exclusion of any particular thing: its existence in the Subject is not asserted ''. (He does not mean that a vyāpti of P with M is asserted. This is asserted in the nidaršana, not in the apadeša. He expressly says that the 'sādhanasya sāmarthyam' can only be stated after the 'svarūpāvagati').

²Vātsyāyana says that the Reason or Second Member is the assertion of the probativeness of the reason, i.e. the assertion that the reason is a reason (sādhanatāvacanam hetult. NBh p. 41 !. 1 on NS I. i. 31. See below p. 279 for his further comment in NBh p. 45). This seems to ignore the function of asserting that S is M (pakṣadharmatā) later assigned to the second member. And accordingly he seems to assign this function—not how ever in the simple form of pakṣadharmatā, 'S is M', but in the elaborated form of parāmarša, 'S is M-which-is-P',—to the Fourth' Member of Appli-

Negative form of application

"And, after grasping the absence of this (i.e. of the Mark) where the Property is absent, we say—" and wind is not thus not-possessed-of-movement"."?

(v) The Conclusion

"The Conclusion is the re-assertion of the Proposition for the purpose of producing certitude in others about a Property which has been enunciated as the property to be proved but which was before (when first enunciated in the Proposition) uncertain. That is

cation, the function of which he declares to be 'the statement that the probans resides in the same locus with the probandum' (sādhanabhātasya dharmasya sādhyena dharmena sāmānādhikaranyopapādanam upanayārthah.

NBh p. 45 l. 4).

It must be admitted however that the passage at p. 41 presents difficulties. The sentence sādhyc pratisandhāya dharmam udāharane ca pratisandhāya tasya sādhanatāvacanam hetuh ('the reason is the assertion of the probativeness of a property (M) after joining it with the subject (S) and the example') seems to imply an inversion of the order of premises: the true order being given in the parallel passage at p. 44 ll. 16-17 asati hetan kasya sādhanabhāvaḥ pradaršyate udāharane, sādhyc ca kasyopasamhāraḥ syāt? 'Without the Statement of the Reason there would be nothing of which the probativeness is set forth in the example, nothing which is applied to the subject'.* I suppose the explanation is that Vātsyāyana here realises that 'probativeness' logically presupposes that S is MP and that XP's are M: although in the statement of the 'syllogism' these two premises are posterior to the statement of the reason.

At p. 43 1. 7 he says that the hetu also has two forms as well as the udāharana and the upanaya (drividhasya punar heter drividhasya codāharanasyopasanhlāradvaitam). The hetu, stated simply in the word utpattidharmakatvāt, is the same in form, whether it be sādharmyokta or vaidharmyokta. But in its usage it is twofold, as similar to or different from the example (cf. NBh p. 45 1. 2 udāharanena samānusya riparītasya vā . . . sādhakabhāvavacanam hetuh). The latter case corresponds to an Aristotelian syllogism in which the minor is of the opposite 'quality' to the major premise—esce Note on the Indian Syllogism, p. 399 f. otnot 2.3.)

Pratyāmnāya. The verb pratyāmnā—has the meaning of reciting or repeating after some one clse (M-W). Srīdhara's gloss is: sādhyadharmasya dharmini pratyāmnāyah. pratyāvṛttyābhīdhānam yena vacanena kriyate tat pratyāmnāyah, i.e. it is the proposition in which we come back

to the assertion of P as residing in S.

²prathamam sādhyam abhihitam, na tu tan niscitam pratijūāmātreņa, sādhyasiddher abhāvāt. Tasyopadaršite hetan, kathite ca hetoh sāmarthye, niscayah pratyāmnāyena kriyate (Sri nara). The pratijūā is the Greek problēma, the pratyāmnāya is the sumperasma. The Proposition reappears as a Conclusion after the Reason has been mentioned in the Second Member and after its cogeney (sāmarthya) has been set forth in the Third and Fourth Members—hetūdāharaņopanayair hetos trairūpye daršite NK p. 252 1, 12).

to say,' the Conclusion is the re-assertion of the Proposition for the purpose of producing through a completed syllogism (parisamāptena vākyena) certitude about what has been enunciated as the property of which knowledge is to be conveyed, but which was before uncertain, in the minds of others who have now, through the Statement of the Reason and through the other Members of the syllogism, grasped its cogency (pareṣām hetvādibhir āhitaśaktīnām)². The Conclusion is in the form 'Therefore it must be a substance' (tasmād dravyam eva). (It is an essential member of the syllogism) because, if it is absent, the other members—whether collectively or separately—do not convey its meaning (tadarthavācakatvam nāsti)³.

^{*}more suo, he glosses his own words. See above, p. 170 n. 3.

²Srīdhara glosses by: hetūdaharanopanayair avayavair hetos trairūpye daršite samjātānumeyapratipattisāmarthyānām. But Prašastapāda may have meant by šakti the psychological tendencies or potencies produced by the premises—" who have now formed the mental dispositions necessary for the reception of the conclusion as a conclusion".

^{*}Each member has a separate meaning or force (artha) which it is its peculiar purpose or function (artha) to convey. No member can per form another member's function. The function of each member terminates in the expression of its own meaning—pratijñādayo 'vayavāh pratyckam svārthamātreņa paryavasāyinah. Without the Conclusion they cannot convey the unitary meaning which belongs to the syllogism as a whole. But when the Conclusion is added, the various members, assisted by the felt incompleteness of the sense, and achieving a relation as of parts. To a whole, become able to convey the unitary meaning—asati pratyāmnāye naikam artham pratyāyitum īšate, svatantratvāt: sati tv etasmin, ākānksopagrhīteh angāngibhāvam upagacchantah šaknuvanti. (NK p. 252 ll. 16—19).

The difficulty of assigning a separate function to the Conclusion, parallel to the functions assigned to the 'premises', comes out clearly in this discussion. For after all he has to admit that it is the premises which, in addition to their separate functions, somehow also achieve the function of conveying the unitary meaning. And he does not make it clear how the Conclusion helps them to acquire this, so to say additional, function. Nor does the Conclusion seem to have any special function, since it is after all the premises that convey the 'unitary meaning'. (It is with this latter objection that Prasastapāda deals in the next sentence.)

Vātsyāyana says; "nigamana has the force of nigamyante anena: that is to say, the four other members—Proposition, Reason, Exemplification, and Application—'nigamyante anena ekatra' 'are made thereby to come into one point'. Nigamyante means samarthyante, 'are made applicable or 'have their functions brought together': or else sambadhyante, 'are

"The objection that the Conclusion need not be stated because its purport is already conveyed by the premises proves too much: for on these grounds it might be held that only the Reason is to be stated after the Proposition, since people of understanding will grasp the purport of it from remembering the positive and negative concomitances (of the reason with the property to be proved). Therefore it is only with the Fifth Member or Conclusion that the meaning of the syllogism attains completion (tasmād atraivārthaparisamāptiḥ)."

brought into unity ''. In other words, the Conclusion is the expression of the unity of the premises (NBh. p. 44 ll. 2-3). Later on, however, he has a phrase viparītaprasangapratisedhārtham nigamanam (p. 45 l. 5), which seems to be the germ of the special function later assigned to the Conclusion,—that of denying satpratipakṣatva and bā-thitaviṣayanton.

'Srīdhara represents the objector as holding that the aggregate of conditions which produce knowledge are the same in inference for another as in inference for oneself, the only difference being that in the latter this set of conditions is applied by oneself, while in the former it is communicated by another. In both cases this set of conditions, viz., the Mark possessed of residence in the Subject and positive and negative concomitance with the Property (pakṣa-tharma-tānvayavyatirekopāpannam lingam), leads to the inferential knowledge. What need then of stating the Conclusion?

He represents Prasastapāda as replying that it is the cogency of the Mark, and not the thing to be proved, that it communicated in the five-membered statement. Now this cogency of the Mark does not consist merely in residence in the subject and in universality of concomitance proved by examples (na tasya sāmarthyam bahirvyāptipakṣadharmatāmātram): for even when these conditions are satisfied an inference may be neutralised by an equally cogent counter-inference (satpratipakṣa) or sublated (bādhita) by some other instrument of cognition. The cogency of the Mark then implies further that it deals with a subject-matter which is neither 'neutralised nor 'sublated' (abādhitaviṣayatvam asatpratipakṣatvam apn' sāmarthyam). The use of the Conclusion then is in declaring that the reason is competent to establish the Property because the assertion of its cogency has been made after the absence of neutralisation of sublation has been ascertained.

(This classical Naiyāyika teaching of the paūcarūpopapanna hetu is. I thir's, not to be found in Prašastapāda. The artificiality of finding a function for the conclusion by assigning to it the business of asserting that in this case the conclusion is true, is obvious: and the assertion can only be an ipse dixit—though Srīdhara speaks of the conclusion as setting forth 'viparītapramānābhāvagrāhakam' pramāṇam'.)

As to the suggestion that the hearer may be left to supply one or more premises. Sridhara replies (1) that 'inference for another' is not addressed to the instructed, and (2) the form of the 'syllogism' cannot be settled in accordance with the degree of understanding of the person addressed: for, on account of the difficulty of getting at other people's mental processes.

Praśastapāda's syllogism.—Collecting the illustrations of the various Members as given above we have the syllogism:—

Positive Form.

1. Wind is a substance. dravyam vayuh.

- 2 Because of the possession of movement. kriyāvattvāt.
- 3. What is possessed of movement is found to be substance: as an arrow. Yat kriyāvat tad dravyam dṛṣṭam: yathā sarah.
 - 4. And even so is wind possessed of movement. Tathā ca vāyuḥ kriyāvān.

Negative Form.

What is not substance is not possessed of movement: as Being Yad adravyam ta kriyāvan na bha vati: yathā sattā.

And not so is

wind not-possessed-of-movement.
Na ca tathā vayur

nişkriyah. 🤚

5. Therefore it must be a substance. $Tasmād\ dravyam\ cva.$

This formulation differs from that of Vātsyāyana in the statement of the positive and negative concomitances in the Exemplification with (as western logic would say) the order of the terms fixed and the subject distributed; so as to avoid (what western logic would call) an undistributed middle in the positive syllogism and an illicit process of the major in the negative syllogism. This

it is impossible to say that just so many premises will produce understanding while just so many will fail to produce it, in any particular case—na copratipādyasya kiyaty ange pratipattir asti kiyati nāstīti šakyam avagantum paracittavrtter durunneyatvāt (NK p. 253 l. 10). He quotes a śloka from an unidentified source to the effect that the statement of inference musfollow the nature of the thing, and not the nature of the persons to whom it is addressed. We should probably express the same thing by saying that the number of the premises is determined by logical and not by psychological reasons.

vidhi ' or fixed formula for the Third Member is characteristic of the logic in which avinābhāva and the trairūpya were the leading conceptions. But these conceptions are foreign to Vātsyāyana's logic, and his Exemplification has not crystallised into a 'major premise.' He states his syllogism thus:—

, Vātsyāyana's syllogism.

Positive Form.

Negative Form.

- 1. Sound is transitory. anityah śabdah.
- 2. Because of having the character of being originated. utpattidharmakatvāta
- 3. Substances like pots which have the character of being originated are transitory. utpattidharmakan sthalyādi dravyan anityam.
- 4. And even so has sound the character of being originated. tathā cotpattidharmakaļi śabdaļi.

Substances like soul which have not the character of being originated are eternal. anutpattidharmakam ātmādi dravyam nityam dṛṣṭam.

And not so is sound a thing which has not the character of being originated. na cartathā nutpattidharmakah sabdah.

5. Therefore, because of having the character of being originated, sound is transitory. tasmād utpattidhurmakatavād mityāh šabdah.

It has been suggested' with some plausibility that the tathā, 'so', of the Fourth Member was originally correlative to yathā, 'as', in the Third Member, and that the latter member was in form originally what it always remained in name, an Exemplification: the inference being formally an argument 'from particular to particular, e.g.—

1. The hill is fiery,

Because it is smoky:

3. As the hearth is smoky and fiery,

4. So is the hill smoky, and

Therefore fiery.

This formulation of the syllogism is not however to be found in any logical work. But something like it is found in the curious interlude on logic which is inserted in Caraka's system² of medicine. The example of syllogism there given is :—nityaḥ puruṣa iti pratijñā; hetur akrtakatvād iti; drstāntah akrtakam ākāsam tac -ca nityam; upanayo yathā cākṛtakam ākāśam tathā purusah; nigamanam tasmān nitya iti.

Caraka's Syllogism.

Man is eternal:

2. Because he is not a product:3. Ether is not a product, and it is eternal:

And, as ether is not a product, so man:

Therefore he is eternal.

Perhaps this gives us the explanation of the ca in the Fourth Member; which seems to have been a primitive part of the formulation of that member⁴.

But it was always implied in the fourth.

Keith ILA \(\beta \). 87. He says that the form of the Fourth Member was originally presumably tath\(\bar{a}yam \) "—instead of tath\(\bar{a} \) c\(\bar{a}yam \). Both Vātsyāyana and Prasastapāda insert the ca in the Fourth Member: and in the Third Member Vatsyayana does not use yatha; while Prasastapada, though he

has a yathā, does not use the yathā which would be correlative to tathā.

²Carakasamhith, vimānasthāna, chapter viii (Calcutta 1877 p. 300).

³This is the 'sthāpanā'. The pratisthāpanā proves that ''man is transitory because he is an object of sense'—in precisely the same form.

⁴That is to say 'yathā' was never an element in the Third Member.

But it was always implied in the fourth.

It has been said that for Vatsyayana inference was still really argument from analogy.—It is true that Vātsyāyana's logic is more primitive than Prasastapāda's. He never attempts to lay down 'Canons of Syllogism' as a criterion by which a genuine reason is to be distinguished from a mere appearance of a reason: this was left for Praśastapāda or for some predecessor of Praśastapāda,2 and it marks a very important development in logical theory. But at the same time Vātsyāyana is emphatic in drawing the distinction between argument from mere similarity or difference, and argument from that sort of similarity or difference which alone, as proving the Property to be proved, can be called a 'reason' (hetu). The function of the Reason as Member of the Syllogism is (he says) to state a relation of probans and probandum (sādhyasādhanabhāva) as subsisting between the Property to be proved (P) and a character (M) which the Subject (S) shares with the positive examples or in respect of which it differs from the negative example: while the function of the Exemplification (udāharaṇa or Third Member) is to show forth the probans-probandum relation as subsisting between the two qualities (M and P) in one instance⁴. The difference between sophistry and reasoning is just this, that the sophist opposes true reasonings by arguments based on arbitrarily chosen likenesses and differ-

¹Keith ILA p. 27.

²i.e. the formulator of the trairūpya, whoever he may have been. It seems to me that the conception of 'he trairūpya is as important as the notion of 'universal connection' (avinābhāva),—the 'discovery' of which is sometimes represented as being the great achievement of Dinnāga or of Praśastapāda. The trairūpya constitutes the Canons of Syllogism for Indian Logic. It would arise quite naturally out of the Vaisesika doctrine of fallacies, which preceded it in the evolution of logical theory. The 'asat' and 'anaikāntika' fallacies contain at any rate two of the Canons, by implication.

^{*}I am not sure that it was a development in the right direction, however,

^{*}NBh p. 45 l. 2 on NS I. i. 39 udāharaņena samādasya viparītasya vā sādhyasya dharmasya sādhakabhāvavacanam hetvarthah. dharmayoh sādhyasādhanabhāvapradarsanam ekatrodāharaṇārthah.

ences without having established in his example the existence of such a relation of probans-probandum between the two properties (M and P)¹: whereas a genuine reason is a property probative of what has to be proved (sādhanabhūtadharma) and not a mere similarity or a mere difference (sādharmyamātra, vaidhdrmyamātra). Indeed the leading motive of Vātsyāyana's logic might be said to be the assertion of the distinction between the true reason, as probative, and the sophistical reason (jāti) based on mere fortuitous similarity and difference²

SECTION 4. TRAIRUPYA AS THE CANON OF SYLLOGISM

Praśastapāda's Bhāṣya, page 200

Inferential knowledge is called laingikam jñānam, which, as the name implies, is the knowledge which arises from experience of a 'mark' (linga) which serves as the middle term or reason to establish the conclusion. The mark which brings about an inference (lingam anumāpalam) is characterised in the following verses cited by Prasastapāda:—

yad anumeyena sambaddham prasiddham ca tadanvite tadabhāve ca nāsty eva, tal lingam anumāpakam riparītam ato yat syād ekena dvitayena vā viruddhāsiddhasamdigham alingam Kāsyapo'bravīt.

loc. cit. l. 7. avyavasthöpya khalu dharmayoh sädhyasädhanabhävam udäharane jätivädi pratyavatisthate. vyavasthite tu khalu dharmayoh sädhyasädhanabhäve dṛṣṭānte gṛhyamāne sādhanabhūtasya dharmasya hetutvenopādānam, na sādharmyamātrasya na vaidharmayamātrasya vā.

assigned in the sūtras to the discussion of sophistical arguments (jūti. NS V. i.—forty-three sūtras) is that the Nyūya is the assertion of logic against sophistical dialectic of the type which furnished the armoury tof sūnyavūdins like Nūgūrjuna. Keith's remark (ILA p. 24) that 'Nūgūrjuna's dialectic as sophistic was too much in harmony with the taste of Gautama not to attract his attention' is, I think, misleading. Gautama devotes so much space to the sophist, not because he was in sympathy with sophistry, but because he hated it,—and because it was at the time an urgent need to defeat the sophist. How effective the Naiyūyika's attack was, is perhaos evidenced by the fact that the sūnyavūda gave place to the vijūūnavūda, and that Buddhist logic adopted Naiyūyika principles.

"What is conjoined with the probandum, and has been found in what possesses the probandum, and is always absent in its absence, is the mark which brings about inference. What differs from this in one or in a pair of these respects is no 'mark', being either contradictory, unreal, or doubtful. Thus said the son of Kaśyapa."

The 'son' of Kaśyapa' is presumably intended to be Kaṇāda, the author of the Vaiśeṣika Sūtra: but there is no authority in the Sūtra for attributing to him the doctrine of the Trairūpya, or three characters of the valid middle term, which is expounded and attributed to him in these verses. Nor is there any indication of the source from which Praśastapāda cites the verses.

A similar doctrine is expounded by Dinnāga in the line from his *Pramāṇasamuccaya* cited by Uddyotakara and by Vācaspati Miśra¹:

anumeye 'thá tattulye sadbhāvo nāstīta' sati.

"existence in the probandum, and in what is like the probandum, absence in what is not (like the probandum)". In the schools language of a later age² this becomes: anumeye sattvam eva: sapakṣa eva sattvam: asapakṣa evāsattvam eva.—"The three characters of the mark (trairūpyam lingasya) are existence only (never non-existence) in the Subject or thing denoted by the minor term; existence in things which resemble the Subject only (never in things which do not resemble the Subject, i.e. in 'ripakṣas'), and only non-existence (never existence) in things which do not resemble the subject." The resemblance to the subject which is intended is of course resemblance to the Subject of the inference in respect

³NV р. 58 1. 2. NVT р. 127. Vidyābhūṣaṇa HIL р. 288.

 $[\]bullet^2 Ny\bar{a}yabindu$ p. 104 l. 3. asapaksa here takes the place of the usual ripaksa, anumeya that of the usual term paksa.

of that which constitutes it the subject of inference—i.e. resemblance in respect of possessing the anumeyadharma, the major term, P. The meaning of the three conditions then is, according to the commentators:—

1. The mark or middle term must be present and never absent in the Subject of the inference, i.e. the minor term.—S must be M.

2. The middle term must be found only in things known to have the property P.—

Only XP's are M (not necessarily all XP's).

3. The middle term must be only absent (never present) in things in which the property P is known to be absent—

All Xnon-P's must be non-M. i.e. No Xnon-P's may be M.

The difficulties which arise in connection with the formulation of the three canons by the help of the restrictive particle eva, 'only', were insisted on by Uddyotakara1. For the present it is sufficient to point out that the trairupya, even as thus interpreted, makes the syllogism essentially an affair of examples,—sapaksas or concrete cases of P. and vipaksas or concrete cases of the absence of P: and that there is nowhere to be found in it a statement of universal connection between M and P as abstract characters. The 'canons' amount to this, that if you can point to cases in which M is P (sapaksa), and your opponent cannot point to any case of non-P (vipaksa) in which M is found (all adduced cases of non-P being non-M), then your middle term is valid. such a view of inference it is necessary that there should be concrete examples. And this tradition of the necessity of actual concrete cases continued even after the trairupya

It is clear from Uddyotakara's criticism that Dinnaga read 'avadhāranas' into his formula; probably in virtue of the doctrine that words have significance through 'apoha', i.e. exclusion of all else. If you say A is B, your real meaning may be that A is not-not-B,—or, if you prefer, that A is not-not B,—or again that not-not A is B; or even that not-not A is not-not not-not B.

had in fact-changed its meaning: so that the second and third canons still retained the implication that there must be sapakṣas and vipakṣas, and the habit of queting 'examples' in the 'major premise' (accordingly called always by a name which implies exemplification,—udā-haraṇa or nidarśana) became ingrained in the Indian logician.

The traixupya however began to lose its simple character as a statement of the rules of argument from example as soon as the restrictive particle eva began to appear in the interpretation or formulation of the second and third canons: as for example it does in the third canon in the lines cited by Prasastapada. You are no longer content to adduce non-P's which are non-M in support of your M's which are P. You take the very significant step of asserting that non-P's are only to be found in the absence of M. The intention of the 'only' may have been quite innocent in the first instance."My opponent does not, adduce a case of non-P which is M. But be would if he could. Ergo he cannot." From which it is a natural, though not a necessary, step to "Non-P's cannot be M". But that is the same as saying that only P's can be M. And so the 'only' must find its way into the second canon also, as soon as it has appeared in the third. The trairupya has now assumed the form in which the Nyāyabindu formulates it: open to the obvious criticism that the insertion of the only ' into both clauses makes both clauses say exactly he same thing, viz., that M cannot be non-P.

Moreover, examples as such do not show that M annot be non-P ($avin\bar{a}bh\bar{a}vaniyama$)—all that the xamples show is that M as a matter of fact has been ound (drsta) to be P, and that non-P has as a matter of fact been found to be non-M.—Examples cannot prove an only in any other sense than in the sense of invariable xperience ($bh\bar{u}yodarsana$), which will always be exposed to the danger of a contradictory experience.

How a really universal connection could be arrived at was a difficult question, in connection with which is sometimes cited1 this couplet from a Buddhist writer ²kāryakāranabhāvād vā svabhāvād va niyāmakāt avinābhāvaniyamo, 'darśanān na, na darśanāt. 'A rule of inseparable connection arises from a necessitating causal relation or identity of nature; not from negative experience, nor yet from positive experience". You may doubt the inseparability of a connection asserted merely on the basis of frequent experience (bhūyodarśana): but you cannot doubt a connection which rests in the causal relation (tadutpatti) or identity ($t\bar{a}d\bar{q}tmya$): for the denial of these relations is self-contradictory: and. according to the maxim later formulated by Udayana," vuāghātāvadhir āśankā—self-contradiction sets bounds to doubt.

But, whatever solution may be offered of the problem of the justification of an assertion of inseparable connection—the assertion that M 'is not without' P $(arin\bar{a}bh\bar{u}ta, avin\bar{a}bh\bar{u}ta)$ —, the necessity of an explicit assertion of such inseparable connection in the $trair\bar{u}pya$ must have become plain, as soon as Vātsyāyana's innocent formulation of the $ud\bar{a}harana^4$ was exchanged for the sophisticated 'vidhi' or statement of principle' which had the

²Vidyābhūsana *HIL* p. 376 (footnote 5) identifies this couplet as from Dharmakīrti's *Pramāṇa-vārtika-kārikā*.

¹e.g. /Sarvadaršanasdingraha, chapter on the Bauddha system, first page: Nyāyakandalī p. 207 l. 8: Tārkikarakṣā p. 82.

^{*}Kusumāñjali III. 7. quoted in Sarvadarśanasamgraha, loc. cit.

^{*}NBh. (on NS I. i. 39) p. 44 ll. 6 and 8. utpattidharmakam sthat lyādi dravyam anityam ity udāharanam. raidharmyokte 'pi [in the negative form of the argument] . . . anutpattidharmakam ātmādi dravyam nityam drstam. "Pots and other substances which have the character of being produced" are non-eternal. . . The soul and other substances which have not the character of being produced are seen to be eternal".

[&]quot;yatra dhūmas tatrāgnir, agnyabhāve dhūmo 'pi na bhavati. PB_{-} p. 205 l. 10.

[&]quot;Where there is smoke there is fire—in the absence of fire smokalso is absent?". M is P, and non-P is non-M.

yat prayatnānantarīyakam tad anityam drstam, yathā ghatah . nityam aprayatnānantarīyakam drstam, yathākāsam. ''All that is the result

effect of turning the udāharaņa or nidaršana into what we should call a 'major premise'.

In what has been said so far the later interpretation of the first clause of the trairūpya has been followed, according to which the first clause lays down the requirement of pakṣadharmatā, i.e. states that S must be M (and not that M must be P, which would be the form taken by an assertion of avinābhāva). But reasons a priori have been given which would supply a motive for interpreting the first clause in the sense of a statement that M must be P. And, in view of the constant ambiguity in the use by the early schools of the term translated nrobandum—sādhya or anumeya 1—there is nothing to prevent our assigning either sense to the word anumeya in Dinnāga's and Praśastapāda's statement of the first Keith maintains² that Dinnaga meant by his first clause that S must be M, while Prasastapada meant by it that M must be P. His first argument for this interpretation of Dinnaga's meaning, -namely, that the Nuāuabindu interprets it so—, may be set aside. Later commentators always interpret older writers in the light of the notions prevalent in their own time: and the same argument would also prove that Prasastapāda's first clause means that S must be P; because in his case also the later commentator, Śrīdhara, says plainly that he meant this3. But we can safely ignore here the interpretations which Dharmakīrti and Śrīdhara give of Dinnāga

of volition is found to be non-eternal, like a jar . . . the eternal is found not to be the result of volition, like ether."

¹We may take *şādhya* or *anumeya* as an ambiguous abbreviation for either sädhyadharma (anumeyadharma) or sådhyadharmin (anumeyadharmin); in which case the ambiguity of the terms is an accident, of language. Or we may suppose that the ambiguity was an ambiguity of thought natural to the earliest formulation of inference, and that this ambiguity was subsequently realised—and that then the distinction between the saddyadharma and the sadhyadharmin was drawn. The latter supposition seems to be the

^{*}Indian Logic and Atomism, pp. 137-8.
*NK p. 200 1. 23 "anumeyah pratipipādayişitadharmaviśisto dharmī". Again p. 201 1. 23 "anumeyenärthena sädhyadharmina".

and Prasastapada respectively.—Another argument which Keith uses is however a real difficulty for those who, like Śrīdhara, interpret Praśastapāda's anumeyena to mean anumeyadharminā. The argument is that in the second clause tadanvite must mean anumeyadharmānvite: and if tad means anumeyadharma here, then anumeya in the first clause (which is denoted by tad here) must also mean anumeyadharma¹. The same reasoning could be used (though Keith does not make this application of the argument) to prove that Dinnaga must have meant by anumeya the minor term, anumeyadharmin; because tattulya clearly means 'like the subject, or minor term'.—

dharmin in the phrase taddharmabhāvī.

It should be mentioned in this connection that the first clause of Dinnāga's trairūpya is atways criticised by Uddyotakara as referring to paksadharmatā. This of course proves nothing as regards the actual meaning of Dinnaga. Uddyotakara would naturally criticise Dinnaga in the light of the meaning which his later Buddhist followers read into their master's words. What however is of some interest is the fact that Srīdhara answers the objection which Uddyotakara brings against Dinnāga in this See NK 7. 200 connection, as if it were a criticism of Prasastapāda a'so.

1. 24 ff. (lines 21-25 seems a quotation of Vartika p. 58 l. 6).

¹The opposite of this argument is used by Vätsyävana on NS I. i. 36, where he points out the two senses which sādhya may have: "sādhyam ca dvividham, dharmivişişto vā dharmah sabdasyānityatvam, dharmavişisto wī dharmā anityah sabda iti". The sūtra is: sūdhyasūdharmyūt taddharma-bhāvī dṛṣṭānta udāharaṇam. Vātsyāyaṇa argues that sūdhya here must mean sūdhyadharmin, because tad denotes sūdhya, and tad must mean sūdhya-

Keith's argument is, I think, not conclusive, because it depends on the presumption that a term cannot be used in two senses at once. It is possible that the sense of anumeya was left, deliberately or not, indeterminate in the first clause. In that case the tad in the second clause would have its sense fixed in one or other direction by the phrase in which it occurs. If you use the phrase tattulya—as Dinnāgu did—then tad is fixed in the sense of sadhyadharmin; the phrase meaning 'homogeneous with the minor term [though Vidyābhūsana and Keith translate it, 'homogeneous with the major term']. If however you prefer to use the phrase tadanvite in the second clause, as Prasastapada did, then your tad is determined. as pointing to the sadhyadharma element in the fluid term sadhya of the first clause, and must be rendered 'endowed with the major term'. But this does not prove that Dinnaga's anumcya in the first clause meant minor term, and that Prasastapada's anumeya in the first clause meant on the contrary major term. They may both have left the meaning of anumcya fluid in the first clause; and the choice of the different phrases in the second clause may at most indicate that one element in the fluid meaning tended to predominate in Dinnaga's mind, while the other element tended to predominate in Prasastapada's mind. But I do not think it indicates even this much.

But as a matter of fact Praśastapāda himself in another passage¹ uses the term tatsamānajātīya,—which is of course synonymous with Dinnāga's tattulya. And in the light of this passage the argument from tadanvite seems to lose the weight which otherwise one would be inclined to allow it. So far as these arguments go then, there is no reason to suppose that Dinnāga meant by his anumeye sadbhāvah something different from the meaning which Praśastapāda attached to the phrase anumeyena sambaddham: nor is there, in these arguments, any proof of what meaning the two authors did attach to these phrases.

Turning to Prasastapāda's explanation² of the phrase anumeyena sambaddham, and to various other passages in his Bhāsya which connect with this topic, we find that while his explanation supports the interpretation of anumcycna sambaddham as a statement that S is M (pakṣadharmatā¹), the other passages make it sufficiently clear that his logic embodies a doctrine of universal connection between abstract 'terms, 'M and P (anumeyasāmānya, lingasāmānya), for which the trairūpya seems to find no place when its first clause is interpreted as a statement that S must be M. The explanatory passage runs: yad anumeyenārthena dešavišese kālavi-🕉 se vā sahacaritam, anumeyadharmānrite cānyatra sarvasmin ekadese vā prasiddham, anumeyaviparīte cá sarvasmin pramānato 'sad eva, tad aprasiddhārthusyānumāpakam lingam bhavatīti. "That which at any particular

¹PBh. p. 237 l. 16—18.

²PBh. p. 201, II. 18-20, cited and translated by Keith p. 139.

⁵PBh. p. 205 E. 10—14; p. 237 I. 16 ff.; p. 246 II. 15-16; p. 247 tananugatanidaršanābhāsa II. 4 and 5, and avyāvṛttanidaršanābhāsa II. 7 and 8); p. 249 II. 7—11.

^{*}I do not see how it can be said that "the wording confirms the view that the first condition refers to the tion of middle term and major, not of middle term and subject: the the nountain, not the subject which is not thing whose attribute is to be inferred from the addition of artha to anumeya makes any difference. If Prasastapada had wished to be clear he could have said dharmen instead of arthena.

place or at any particular time is concomitant with the probandum-thing; which elsewhere also is known to exist in things possessing the quality which is to be proved, whether existing in all such things (i.e. sapaksas, XP's) or only in some of them; and which is known from some valid instrument of knowledge to be only absent (and never present) in everything that is different from the probandum:—this is the mark which enables us to infer something not (otherwise) known."

Taking the language of this passage at its obvious value, we should surely not hesitate to interpret Praśastapāda as meaning that anumeyena sambaddham is an assertion that S must be M. The word anyatra is glossed 'sapakṣe' by Śrīdhara and seems clearly to imply that the first clause has had a reference to something other than the sapakṣa's—and this something other than the sapakṣa can only be the pakṣa. Moreover the phrases deśaviścṣe kālaviścṣe vā seem to be altogether inappropriate to the statement of a universal concomitance, but appropriate to a statement that this or that particular S is M.

I believe that the *trairūpya* was a legacy inherited by Praśastapāda and Diṅnāga from an **e**arlier phase of

"The only addition made in this account is that the middle need not be present in all sapakṣas—it is sufficient if some XP's are found to be M (in the terminology of our syllogism, although all M must be P, it is not necessary that all P should be M). Thus the list of Nine Types of Syllogism given in the Nyāyapraveśa, and in the Pramānasamuccya of Dinnāga, contains two valid types, according as all XP's are M, or some XP's are M. Prasastapāda mentions this again, and gives as examples the two valid arguments—

Wind is substance

Because it possesses movement, and

Wind is substance

Because it poscesses qualities.

The latter middle is present in all 'things homogeneous with the probandum', i.e. all substances possess qualities. The former middle on the contrary is present in some substances only, e.g. dis, $k\bar{a}la$, and $\bar{a}tma$ are reckoned as substances, but they are not capable of movement.

logical reflection: and that it could not from its very nature adequately express the universal connection in which they both found the principle of inference. It is possibly a mistake to suppose that they tried to read a statement of universal connection into the first member of the trairūpya. Is it not more likely that, since they made the nidarśana the vehicle of the statement of the universal connection, they would attempt to find the statement of the necessity of a universal connection in the second and third clauses of the trairūpya, which are obviously concerned with the nidarśana?

SECTION 5. CLASSIFICATION OF FALLACIOUS MIDDLE TERMS

Twofold classification of the Vaiścṣika Sūtra

PBh. p. 204. Praśastapāda devotes a brief paraand pp. 238-9. • graph to the interpretation of Vaiśeṣika Sūtra III. i. 15.—The paragraph serves as an explanation of the second of the two couplets which he cites on p. 200 (see above, p. 180).

yat tu yathoktāt trirāpalingād ekena dharmeņa dvābhyām vā viparītam, tad anumeyasyādhigame lingani na bhavatīty etad evāha sūtrakārah aprasiddho 'Napadešo 'San sandigdhas Ceti.

"But a middle term which differs from the mark with the three characters as just explained, in one character or in two, is not a mark which proves the *probandum*: this is what the author of the *sūtra* means when he says 'the false reason is the unproved, the unreal, and the doubtful'".

¹Śrīdhara says ''avinābhūtam iti jňānam yasya nūsti, tam prati dharmini dharmasyānvayavyatirekavato 'pi lingatvani na vidyate''. NK p. 205 l. 7.

It seems clear that Prasastapāda misinterprets the sūtra: for the next two sūtras give instances of two classes of fallacious reason, namely, of the 'asat'—yasmād viṣāṇi tasmād aśvaḥ, 'it is a horse because it has horns',—and of the 'samdigādha'—yasmād viṣāṇī tasmād gauḥ, 'it is a cow because it has horns: 'and if the sūtra had intended three classes of fallacious reason it

'Jacobi, Indische Logic p. 481. Keith ILA p. 139, and 133. Faddegon, Vaišesika System, p. 302. Faddegon notes that "Candrakānta Tarkālankāra splits up III. i. 15 into two aphorisms: aprasiddho 'napadešaḥ and asan sandigdhaś cānapadešaḥ." The addition of the last word (anapadešaḥ) is a variant later than Praśastapāda's time, since he does not read it. It was perhaps added because the tradition of splitting up the 'sūtra' into two sūtras remained: and, when thus split up, Praśastapāda's interpretation is no longer plausible.

But Prasastapāda p. 238 l. 20 gives this as an example of viruddha. And this is a natural way to understand the example. The 'asat' of the

sūtra may in fact = the viruddha.

I do not think that the Sūtrakāra recognises the 'asiddha' class of fallacy at all. His 'asat' means are argument in which the conclusion (not the middle term) 'is not'; just as his samdigdha means an argument in which the conclusion (not the middle) is doubtful. The example given of 'asat' is clearly an example in which the probapdum definitely is not; for what has horns is not a horse. That is to say it is a case of the viruddha or 'contradictory' reason.

Similarly the Nuāyasātra does not recognise the 'asiddha' fallacy: nor does Vātsyāyana. It begins to figure in Irasastapāda. The evidence then is that 'asiddha' is a relatively late concept. This seems to carry with it the implication that pakṣādharmatā was not emphasised in the earlier logic: which again means that the first clause of the trairūpya can hardly have meant for its earliest formulators precisely what later commentators understood it to mean, viz., the requirement of 'pakṣād-harmatā': that M must reside in S.—But if the first clause did not mean this, what did it mean? I have argued above that it probably did not mean the requirement that 'all M must be P'. And there seems to be no other alternative.

Yet perhaps there is an alternative. If we remember how vague Vātsyāyana is about the function of the hetu or second member of the syllogism, we may well expect a similar 'vagueness in the meaning of the anumeye' sti or anumeyena sambaddham of the first clause in the trairūpya. The formulator of the trairūpya had not made up his mind about the meaning of anumeya. It was not exactly S; and it was not exactly I. It did not as S exclude the examples, XP's: nor was it sufficiently abstract, as P, to include them. It might have developed the latter sense, had not the nidarsana usurped the function of stating the universal concomitance. Precluded from developing this sense, it developed the other sense—'anumeya' became S and the first clause of the trairūpya became a requirement of paksadharmatā. I think we see the beginnings of this in Prasastapāda: but I think the conception was still fluid, i.e. that anumeya, was neither quite definitely S nor quite definitely P for him.

would presumably have exemplified the third also. Moreover Praśastapāda's explanation of aprasiddha as applying also to the fourth class, asādhārana or anadhyavasita,—which he adds,—is altogether improbable. It seems almost certain therefore that the sūtra must be read in two parts—åprasiddho 'napadeśaḥ. Asan sanidigdhaś ca. 'The doctrine of Kaṇāda as now restored to the text of the Sūtra is perfectly plain: it states a definition of a fallacious reason (anapadeśa). . . as that which is unproved (aprasiddha). Of the fallacious reasons two species are mentioned, the unreal (asat) and the doubtful (samdigdha), which correspond accurately enough to the later asiddha and savyabhicāra''.

The phrase ekena dharmena dvābhyām vā became a source of doubt to the commentators at a later period, ifter Uddvotakara (or some earlier writer) had drawn attention to the existence of apparently valid middle terms which satisfy only two conditions of the trairūpya,—the revalānvayin and kevalavyatirekin of the later schools. Phere is no evidence that either Prasastapāda or Dinnāga had raised the problem involved in this distinction. Śrīdhara, commenting on Praśastapāda from the standpoint of the later schools, raises the question². He says that some hold that the kevalanvayin and the kevalavyatirekin (although apparently excluded by the trairūpya) must be supposed to be included among valid reasons in virtue of their establishment in the sister-śāstra (i.e. the $Ny\bar{a}ya)^3$: while others say that the definition embodied in the trairūpya is to be taken 'vyastasamasta', i.e. it is intended to apply as a whole (samasta) to the ordinary

¹Keith, ILA, p. 133. The amended reading of the $s\bar{u}tra$ is given in his footnote. But his identification of asat with asiddha can be questioned. See preceding note.

²NK p. 203 l. 15—p. 204 l. 22.

³NK p. 204 l. 17 atraike samānatantraprasiddhyā kevalānvayinak kevalavyatirekiņas ca parigraha iti vadanti. apare tu šamastavyastam laksaņam vadanti, etc. The appeal to the sister šāstra (the Nyāya, in this case) has an early precedent in NBh. p. 16 l. 9.

anvayavyatirckin, which must satisfy all three conditions of the trairūpya: but it is only intended to apply by parts (vyasta) to the kevalūnvayin and kevalavyatirekin: the former being valid if it satisfies the conditions of presence in the pakṣa and presence in the sapakṣa (no vipakṣa being available); the latter being valid if it satisfies the conditions of presence in the pakṣa and absence in the vipakṣa (no sapakṣa being available).

Fivefold classification in the Nyāya

The $Ny\bar{a}ya$ $S\bar{u}tra$ (I. ii. 4—9) enumerates and defines five fallacious reasons: but they do not correspond, except in the case of the first one defined, with the fivefold division which became classical in the school later, and which was partly derived from $Bauddha-Vai\acute{s}e\acute{s}ika$ logic. The meaning of the $s\bar{u}tra$ defining the last kind, $k\bar{a}l\bar{a}t\bar{\iota}ta$, had already been lost in $V\bar{a}tsy\bar{a}yana$'s time', as is clear from the fact that he reports two different opinions about it. The identification of it with the $b\bar{a}dhita-hetv\bar{a}bhasa$ of the later school is a guess. It may be a correct guess: but Vātsyāyana himself does not even hint at any such identification.

(1) Sūtra 5. Anaikāntikah savyab ficārah

This is the saindigdha or aniscita of Vaisesika-Bauddha logic,—the inconclusive or doubtful reason. It retained the same name and nature throughout the history of the schools. Vātsyāyana gives the example: 'Sound

^{&#}x27;This implies a considerable lapse of time between the date of Vātsyāyana and the first systematisation of the $Ny\bar{a}ya$. In his comment on I. ii. 9 he cites a couplet:—

yasya yenqrthasambandho dürasthasyāpi tasya sa

arthato hy asamarthānām ānantaryam akāranam. The meaning seems to be that when one word is connected by the sense with another, the connection holds good even if the word is far off (in the order of the sentence); and that juxtaposition does not give meaning to words disconnected in sense.

If this citation could be identified it might provide valuable evidence of Vātsyāyana's date. It has not yet been identified.

is eternal because intangible'. The alleged reason, he remarks, is not confined to the one alternative (ekatra avyavasthitih); or, it is too wide (saha vyabhicāreṇa vartate): for atoms (which are eternal) are tangible, so that there cannot be a probans-probandum relation in the supposed probative negative instance 'the jar which is tangible is transitory'; while consciousness (which is intangible) is not eternal, so that the supposed probative positive instance 'the soul is intangible and eternal' is equally defective. Western logic would say: it is impossible to assert that All intangible things are eternal, and to draw the desired conclusion in BARBARA—

(All) intangible things are eternal

Sound is intangible

Therefore sound is eternal—

for the middle would in fact be undistributed; since some intangibles (consciousness) are in fact not eternal. It is however useless to attempt to equate the Indian savyabhicāra with the western 'undistributed middle'. The Indian is concerned with the question whether the examples show the alleged connection of characters: that is to say, with the question of the material truth of the major premise. The quantitative formalism of the western syllogistic is therefore quite alien to Indian logic: and the attempt to identify the two schemes of fallacy can only lead to confusion.

The western formalist would feel that the negative instance is quite irrelevant: and consequently would say that the objection brought against the present argument, on the ground that atoms although eternal are tangible, is altogether out of place: for the fact that some tangible things are eternal is perfectly consistent with the supposed major premise 'All intangible things are eternal', so far as 'formal consistency' is concerned. There is really no point in examining non-M's, cases where the middle is not found, from a merely formal point of view: for even if you could prove that all non-M is P it would not contradict the major All M is P. The relevant formal counter-instance will be a case of non-P which is M. Therefore it is relevant to examine non-P's (vipaksa): and if you find that no non-P is M (all non-P is non-M) you will have confirmed your positive major All M is P, by establishing its obverse. This is the line which Vaikesika-Banddha logic took: and in doing so it approached a formal standpoint. But the earlier Naiyāyika school was concerned to examine cases of M.

Vātsyāyana sums up the objection to the argument under consideration by saying that both kinds of example, positive and negative, are forthcoming, and that in both of them there is inconclusiveness; and therefore the probans-probandum relation does not subsist here (dvividhe' pi dṛṣṭānte vyabhicārāt sādhyasādhanabhāvo nāsti).

(2) $S\bar{u}tra$ 6. Siddhāntam abhyupetya tadvirodhi viruddhah

"The contradicted reason is that which after accepting a tenet contradicts it."

This does not correspond with the normal type of the viruddha as expounded in later logic, which follows Vaiseṣika teaching here, giving the name to a middle term which proves the contradictory of what it purports to prove: as, this creature is a horse because it has horns. Nor does the sūtra apparently intend a fallacy like the iṣṭavighātakrt variety of the viruddha², in which the middle contradicts some implication of the position which it is used to prove.

Vātsyāyana says:—" For example, 'This particular form of reality (*vikāra*) ceases to be manifested, because it is inconsistent with permanence': 'A particular form of reality exists even after it has ceased to be manifested, because it is inconsistent with being destroyed'. The middle term states that a permanent particular form of existence is not possible; and this is contradicted by the

⁽sādharmya) and cases of non-M (vaidharmya); not cases of P (sapaksa) and cases of non-P (vipakṣa). And if they found that M did not extend to non-P (sādharmyam na vyabhicarati) and that non-M did not extend to P (vaidharmyam nta vyabhicarati) they were satisfied that M was probative (sādhanabhāta-dharma) with reference to P. They were not formalists, but aimed at establishing a real connection of M and P. And for this purpose it is relevant to find that non-M is non-P; and it is an objection to the theory that M is connected with P if we find a case of non-M which is P, i.e. in the present argument, if we find that atoms which, are tangible (non-M) are nevertheless eternal (P).

^{&#}x27;See the preceding footnote.

^{*}See p. 203 ff. and footnote to page 204, infra.

defendant's own tenet 'a particular form of reality exists even after it has ceased to be manifested'."

The difference between the $s\bar{u}tra$'s meaning and the istavighātakrt is that the former does not represent the tenet which is contradicted by the middle term as being an implication of the position which the middle term purports to establish. The nature of the fallacy, as explained by Vātsyāyana, is that the defendant proves of one subject in a pair of syllogisms two qualities which cannot coexist because they are mutually contradictory,—namely, cessation of manifestation, and continued existence (astitvam cātmalābhāt pracyutir iti ca viruddhāv etau dharmau na saha sambhavatah). The two middle terms are of course also mutually contradictory.—Either argument, in itself, is not objected to. The fallacy lies, not in either argument taken separately, but in the combination of As thus expounded the fallacy comes very near to the antinomy (viruddhāvyabhicārin) of Dinnāga: but (assuming that one or other of the middle terms is false) we may follow Prasastapada in classing it with the viruddha variety of Fallacious Proposition: in which case it is really the *bādhitahetvābhāsa* of the later schools¹.

(3) Sūtra 7. Yasmāt prakaraņacintā sa nirnayārtham apadistah prakaraņasamaņ

"When the quality from which the question arises is adduced as proving (one of the alternatives), the reason is called *prakaranasama*, *petitio principii*, 'identical with

the question'."

Vātsyāyana's example is: 'Sound is transitory, because we do not find in it the characters of a permanent thing, and things like jars in which the characters of permanent things are not found are transitory: Sound is permanent, because we do not find in it the characters of transitory things, and things like ether in which the qualities of transitory things are not found are permanent'.

¹See infra p. 212 with footnote.

The argument to prove either alternative 'begs the question'1. But comparing the language of Vātsyāyana with that used by Prasastapada in speaking of his asadhārana or anadhyavasita, the reason which leads to no conclusion (adhyavasāyam na karoti), there is no doubt that Praśastapāda conceived himself to be merely interpreting the Nyāya-sūtra's prakaraņasama fallacy in his own anadhyavasita. He is almost certainly writing with reference to Vātsyāvana. Both of them make the same distinction between the savyabhicāra (samdiqdha), which Vātsyāyana here explicitly calls samsayasama, on the one hand, and the prakaranasama or anadhyavasita, on the other hand. The distinction is that in the former fallacy a common quality which gives rise to a doubt is taken as a conclusive reason: as Vātsyāyana says, yatra samāno dharmah samsayakāranam hetutvenopādīyate sa samsayasamah savyabhicāra cva ? whereas in the latter fallacy there is a vimarsa or suspense of judgment due to complete absence of evidence (as opposed to samsaya, a pair of doubtful judgments suggested by evidence, but by evidence which is inconclusive in either direction). We are, in the case of vimarśa, looking for decisive evidence but we do not find it (vimarśasya viścsāpeksitā ubhayapaksaviśesānupalabdhiś ca): and this state of affairs 'starts a question' (prakaranam prarartayati), but supplies no evidence whatever—not even doubtful evidence—towards a conclusion.

It seems clear then that the affiliation of this fallacy is with the anadhyarasita of Praśastapāda, that is to say, with the asādḥāraṇa of the later schools: while the savyabhicāra of the Nyāya-sūtra affiliates with the sādhāraṇa variety of saryabhicāra in the later classification.

¹For the jāti which bears the same name see p. 517 below. The prakaraņasama jāti pretends to show that any argument whatever merely 'starts the question' (prakaraņam pravartaņati), and therefore commits this fallacy.

It would be a mistake to equate it with the viruddhāv-yabhicārin of Dinnāga, which is the satpratipakṣa of the later schools,—a genuine antinomy, where both arguments are equally strong though they lead to contradictory conclusions. Neither Vātsyāyana nor Praśastapāda will admit the possibility of antinomy. There is no satpratipakṣa in the genuine Naiyāyika tradition: it is an aberration in classification adopted by the later schools from Bauddha logic.

(4) Sūtra 8. SĀDHYĀVIŚISTAŚ CA SĀDHYATVĀT SĀDH-YASAMAH

"And a reason which is indistinguishable from the probandum in respect of having to be proved is called the reason which is 'identical with the probandum'."

This clearly resembles the preceding fallacy in being a kind of begging the question: and this kinship with the previous fallacy is no doubt indicated by the word 'and' with which the present $s\bar{u}tra$ commences. Its historical affiliation however is with a variety of the 'unreal reason' or asiddha-hetvābhāsa of Prasastapāda and the later schools1. The variety with which it corresponds the āśrayāsiddha. The example which Prasastapāda gives (under the rubric anumeyāsiddha, which = the later aśrayāsiddha) is "Darkness is substance because it possesses black colour ": the reason here assumes what has to be proved, for we cannot assert possession of a quality unless we already admit that darkness is a substance. Vātsyāyana's example of sādhyasama is almost identical: Shadow is substance because it moves ". He points out that the movement of the shadow is the very thing to be proved: does it move, as a man moves? or is it not the case that, with the movement of some body which cuts off the light, there is a series of obscurations of different portions of light?

[&]quot;This is pointed out in the Vrtti on this sūtra.

(5) Sūtra 5. KĀLĀTYAYĀPADIŞŢAḤ KĀLĀTĪTAḤ

"When a thing is alleged as cause of an effect which goes beyond it in time, the fallacy is called the time-lapsed reason".

The example given by Vātsyāyana is: Sound is permanent because it is manifested by a conjunction (of bodies), like colour (which is manifested by the lamp only because it was there "all the time"). There is no more reason in the one case than in the other to suppose that the quality itself comes into existence through the agency which makes it manifest to us. Just as the colour was in the jar before the light fell upon it, so the sound was in the drum before the drum-stick came in contact with it.

The two cases, Vātsyāyana says, are not parallel: for in the case of colour the manifestation of the manifested quality does not go beyond the time of the manifesting agency (contact with light); cessante causā cessat effectus. But the sound is heard by a person at a distance after the contact of the drum and drum-stick has ceased, and so the production of the quality in this case "goes beyond the time" of the contact (saṃyogakālam atyeti), and therefore is not merely a manifestation: for from the absence of the cause follows the absence of the effect (kāraṇābhāvāddhi kāryābhāvaḥ).

The meaning seems to be this. In the case of the colour we can say that the manifestation is the effect of contact of light with coloured object; and so we can hold that the colour was there all the time and is not an effect which comes into existence through contact with light. But in the case of sound we cannot say that the manifestation is the effect since the sound may be heard after the alleged cause has ceased to exist. In this case then the indication is that sound itself is the effect of the contact of drum and stick: and so we have no ground for

saying that it was there before but was 'manifested' by the contact of drum and stick.

This seems to be a not unreasonable explanation of the sūtra, which then is concerned with a fallacious inference of causation. The argument criticised played a very important part apparently in early controversies: and it is not unlikely that the sūtrakāra give the fallacy which the Naiyāyika finds it a special place in his classification of fallacies. But the meaning of the sūtra was already uncertain; and Vātsyāyana goes on to argue against interpretation of it which identifies it nigrahasthāna described in V.ii.11 under the name ' mistimed '. of aprāptakāla, the This nowever consist merely in failure to state the members of the syllogism in conventional logical order (avayavaviparyāsa): and Vātsyāyana argues that a reason does not cease to be a true reason and become a fallacy merely because the premises are not stated in a particular order. And he adds that the sūtrakāra would not have said the same thing twice, once under the head of hetvābhāsa, and then again under the head of nigrahasthāna.

Fourfold Classification of Prasastapāda

Praśastapāda's detailed account of fallacious reasons is given in the context in which he treats of apadeśa as a member of the five-membered 'syllogism', under the general heading of 'inference for another' (parārthānumāna)¹:—

"The account of the 'statement of the mark' which has just been given implies that a statement of an unreal, contradictory, doubtful, or inconclusive (anadhyavasita) mark is no 'reason' (anapadeśa)."

¹PBh. pp. 238-9. It is a practical inconvenience of the distinction between svārthānumāna and parārthānumāna that it tends to lead to a double treatment of the same topic under different heads.

(i) Varieties of the asiddha or unreal reason

"There are four kinds of unreal (asiddha) reason: unreal for both parties (ubhayāsiddha); unreal for one or other of the parties (anyatarāsiddha); the reason that is not really what it purports to be (tadbhāvāsiddha); and the reason that is unreal in respect of the subject (anumeyāsiddha). An example of the first kind (ubhayāsiddha) i.e. of a reason which both the defendant and the opponent regard as unreal, would be: 'sound is noneternal, because it has parts (sāvayavattvād)'.

An example of the second (anyatarāsiddha) would be: 'sound is non-eternal, because it is a product'2.

An example of the third (tadbhāvāsiddha) would be mist presumed to be smoke when fire is to be inferred through the existence of smoke³.

An example of the fourth kind (anumeyāsiddha) would be 'darkness is an earthy substance, because it possesses black colour'4.

Note.—The Nyāyapraveśa list is practically identical with this. See Vidyābhūṣaṇa HIL p. 293 (=MSIL p. 93). The Śloka-vārtika (anumāna-pariccheda 75—83—uses the later terminology of svarūpāsiddha and āśrayā-siddha; and makes ubhayāsiddha, anyatarāsiddha, and a third variety samdigdhāsiddha, sub-divisions of both these main classes; thus avoiding the cross-division involved in Praśastapāda's classification.

¹The obvious cross-division here is pointed out by Srīdhara, NK p. 240 l. 16 μ .

²The Mīmānisaka who maintains the eternality of sound does not admit that it is a product. "

^{*}Misunderstood by Vidyābhūsana HIL p. 293 and by Faddegon p. 541.

*NK p. 240 ll. 12—16. Srīdhara explains it as aśrayāsiddha "tama nāma dravyāntaram nāsti, āropitasya kārṣnyamātrasya pratīteh". The question is begged when we say because it possesses. What possesses qualities is a substance. But the whole question is whether darkness is a thing which possesses qualities. As Faddegon rightly says (p. 541)" "The anumeya does not exist in the form in which it is supposed to exist in the argumentation". Darkness exists: but it does not exist as a possessor of qualities, i.e. as a substance.

"For the middle term which, in addition to not being found in the Subject (anumeya), is not found in anything homogeneous with the Subject, and is present in the opposite of the Subject, is a contradictory reason. because it proves the opposite of what is to be proved: for example, 'it is a horse because it has horns'."

The connective 'for' (hi) appears to explain why Prasastapāda gives as an example of a contradictory reason the very argument which the Sūtra (III.i.16) has given as an example of the 'asat',—which Prasastapāda identifies with asiddha. The connection of thought then is: "The argument 'it is a horse because it has horns'. even if the middle term does not exist in the Subject (anumeye 'vidyamāno' pi)—so that the argument would so far be a case of asiddha—, is also a contradictory reason in as much as it proves the opposite, i.e. it proves that the subject is *not* a horse ". An unreal reason is not hecessarily a contradictory reason, but a contradictory reason is necessarily unreal. And it happens that the Sūtra's example of unreal reason is also an example of a contradictory reason.

Division of the contradictoru Reason. sion.

No sub-divisions of the contradictory reason are given by Praśastapāda. The Nyāyapraveśa on the other hand (a) Twofold Divi- gives four varieties under this head, while the Hetucakra-damaru doctrine (which is embodied in the Pramāna-

samuccaya) shows two arguments which are classed as contradictory. The two contradictory reasons given in the Hetucakra are¹:—

Sound is eternal because a product

. Sound is eternal because an effect of volition

¹NK p. 241 l. 2 says that Praśastapāda's example corresponds the second of these, its rubric being vipaksaikadešaviti (i.e. it is found in some vipaksas, not all: not all non-horses have horns, but some have).

These correspond to the two valid types given in the Hetucakra—Sound is non-eternal because a product: Sound is non-eternal because an effect of volition. The two reasons which lead in valid syllogisms to the conclusion that sound is non-eternal are two varieties of the contradictory when used to prove that sound is eternal.

(b) Fourfold Division.

The fourfold division of the Nyāyapraveśa includes the former of these two, but ignores the latter: and adds

three others1.

The fourfold list is:—

- (1) Where the middle contradicts the major—
 'Sound is eternal because a product'. See above for this. The Slokavārtika gives the same example, and describes this variety of viruddha as dharmabādha, i.e. sublation of the major.
- (2) "When the middle contradicts the implied major" (Vidyābhūṣaṇa, loc. cit.)
 - —'The eyes are serviceable to some being because they are made of particles, like a seat, bed, etc.'2.

Kumärila gives this argument as an example of his sixth class, dharmadharmivisesabādha, i.e. contradiction both of a particular quality implied in the major and of a particular quality implied in the minor:

tadobhayaviseşasya bādho 'yam sādhyate yadā pārārthyam cakṣurādīnām samghātāc chayanādivat. ātmānam prati pārārthyam asiddham iti bādhanam

¹Vidyābhūṣaṇa HIL pp. 294-5 = MSIL pp. 94-5. Keith ILA p. 135. Sloka-vārttika, anumānapariccheda 11. 96—107.

²Pārthasārathi Miśra in the Nyāyarātnākara ad. loc. says that this is the Sāmkhya argument to prove that Puruṣa is other than Prakṛti. The evolutes of prakṛti have reference to an 'other'. The argument occurs in Sāmkhya Kārikā 17, and Gauḍapāda gives the example of the 'bed'.

asamha'aparārthatve dṛṣṭe samhatatā 'pi ca anahamkārikatvam ca cakṣurādeh prasajyate.

(Sl. Vārt. anumāna, 104—107.)

It is sublation of particular qualities of both major and minor when it is argued that the eyes and other organs serve the purpose of some 'other' because they are composites, like such things as beds. The 'serving the purpose of some other' which is illustrated in the example of the bed is service of a composite, and the middle term (compositeness) which this illustration carries with it is a middle term universally connected with material things: thus there is a sublation which may be expressed in the words 'serving a purpose with reference to the soul is not established': (the sublation consisting in the fact that) there is on the one hand compositeness in the thing experienced (the eye or the bed) although it is supposed [in the former case to serve the purpose of the incomposite soul s and on the other hand that the consequence would follow that the eve and other organs could not be evolutes from the ego-principle (ahamkāra), as the Sāmkhya supposes them to be, if they were not composites".

The Sāmkhya argument is a good one—it is simply the teleological argument. The world is a samghāta, a collocation or arrangement of parts,—an arrangement which points clearly to a user. Material Nature cannot be its own user: matter has no purpose, intrinsically. Therefore there is an immaterial principle to whose uses matter is shaped.

It is a good argument. But it is not a good argument for the Sāmkhya: because the Sāmkhya's immaterial principle, Puruṣa, is by definition so antithetical to matter that it could have no purposes which material aggregates could subserve. And the organs of the sup-

^{&#}x27;NRA explains compositeness as consisting in the 'gunas'—sativa, rajas, tamas.

posed purposes inconsistently attributed to the immaterial principle are explained by the Sāmkhya as being in fact products of the material principle of 'ahankāra'. Thus there is a double inconsistency in the Sāmkhya's use of the teleological argument to prove the existence of soul as separate from matter. (1) The function which he intends to establish as his major (dharma) is a function of a particular kind (dharmaviścsa) i.e. purpose of the soul. his middle (samhatatā) really disproves the particular sort of function which he attempts to prove by it, if aggregates of matter are essentially indifferent to the soul. Again (2) the subject (dharmin) of this argument is the eye and other such organs. These are conceived of in a particular manner (viścsa) viz., as organs subserving the soul. But this way of conceiving of the organs is really sublated by the very middle term which the Sāmkhya uses: for this middle term $(samhatat\bar{a})$ draws attention to the material character of the organs: and, considered as material aggregates, the dharmin, the eyes or other organs, are regarded, quite consistently, by the Sāmkhya as evolutes of a purely material principle, the ahamkāra, the egoprinciple. But the Sāmkhya cannot have his dharmin. the sense-organ, in two ways at once. Either it is an evolute of matter; or else it is organic to the soul's purposes. But it cannot be thought of as both at once.

(3) When the middle term is inconsistent with the minor term. As:—

'Sāmānya (generality) is neither substance, quality nor action; because it depends upon one substance and possesses quality and action.'

¹Keith applies the term <code>istavighātakṛt</code> (ILA p. 135) to this argument; and the term is appropriate. But it is not used in the <code>Slokavārttika</code>; and there seems to be no evidence that Dinnāga used it. It occurs however in the <code>Nyāyabindu</code> p. 113 l. 17, where this same <code>Sāmkhya</code> argument is given. For Dharmakīrti's further remarks on the argument see <code>NB</code> p. 111 l. 3. He has defined <code>sādhya</code> so widely as to cover all that is <code>implied</code> in 'P'; and therefore he need not treat this <code>istavighātakṛt</code> as a separate variety of contradictory reason: it comes under the general rubric of 'M contradicts P'.

The statements here made contradict the definition of $s\bar{a}m\bar{a}nya$ as given by those who maintain that it is a separate category. The property of depending on one substance would prove the contradictory of what is maintained, for it would prove that $s\bar{a}m\bar{a}nya$ was either quality or action: and similarly the character of possessing quality or action would prove that it was substance. (The example is entirely artificial: it could have no existence except as an instance of an argument in a logic manual.)

It corresponds however to Kumārila's third type, dharmisvarūpabādha; "sublation of the essence of the minor":—

ihapratyayahetutvād dravyāder vyatiricyate samavāyam, yathehāyam ghaṭa ityādisangatih. (Śl. Vārt. anumāna 100-101.¹).

"The category of samavāya, inherent relation, is separate from substance and the other categories, because it is the ground of the notion of a thing's being at a particular spot; for instance, such a conjunction of things as is expressed in 'here is the jar' '.

The very notion of the relation of inherence is sublated by the middle term. As the example shows, locality is an affair of samyoga, contact. What is really proved is that the relation is not samavāya,—seeing that it is supposed to be an affair of spatial contiguity between substances.

(4) When the middle term is inconsistent with the implied minor term. As:—

Objects (artha) are stimuli of action, because they are apprehended by the senses. (Vidyābhūṣaṇa notes: "Objects' is ambiguous meaning (1) things and (2) purposes. The middle term is inconsistent with the minor term in the second meaning".)

^{&#}x27;'This seems to refer to VS. VII. 2. 26. [Samavāyam cannot be the right reading.]

This appears to correspond to Kumārila's fourth variety, dharmivišeṣabādha, sublation of a particular property of the minor:—

yac ca sattāvad ekatvam samavāyasya kalpitam tatra samyogavad bhedāt syād viśeṣaviruddhatā. (Sl. Vārt., anumāna 102-103).

"And because unity is supposed to belong to the inherence-relation, as it does to the universal 'Being', there would be sublation of this character (of unity), because there would be a variety of relations of inherence, just as there are a variety of relations of conjunction (i.e. the inherence-relation has been made parallel to the conjunction-relation, in the argument that 'the category of inherence is an independent category, because it is the ground of the notion of a thing's being at a particular spot'. And this will imply that there are many relations of inherence—just as everyone admits plurality of relations of conjunction).

Kumārila says that some give a sixfold division of the *viruddha*, others a fourfold division, others only one kind: 'sodhā viruddhatām āhuś caturdhā vaikadhā 'pi vā' (\$l.Vārt., anumāna, 96).

He himself gives the sixfold division (i) dharmasvarūpaviruddha (ii) dharmaviśeṣaviruddha (iii) dharmisvarūpaviruddha (iv) dharmiviśeṣaviruddha (v) dharmadharmisvarūpaviruddha (vi) dharmadharmiviśeṣaviruddha.

His examples of (i), (iii), (iv) and (vi) have already been given. The other cases are:—
arthavac chabdarūpam syāt prāksambandhāvadhāraṇāt,
vibhaktimattvāt, paścādvat, svarūpcņeti cāśrite
asvarūpārthayogās tu pascāc chabdasya dršyate
tena prāg api sambandhād asvarūpārthatā bhavet.
(Śl. Vārt., anumāna, 98—100).

You argue that a word has meaning even before its relation to other words in a sentence is grasped,—it has meaning as an isolated unit, svarūpeṇa. But the reason you give, vibhaktimattvāt paścādvat, contradicts this qualification svarūpeṇa; for the meaning which the word has in virtue of possessing inflections, as in the case of the word after its relation to other words in the sentence has been grasped, would not be a svarūpārtha. As Pārthasārathi Miśra says ad. loc., the vyāpti that is seen is between possession of inflections and the conveying of a meaning other than meaning as an isolated unit,—svarūpātiriktārtha¹.

nityam ātmāstitā kaiścid yadā Sautrāntikam prati sādhyatc 'vayavābhāvād vyomavad dvayabādhanam. (Sl.,Vārt., anumāna 103-104).

Pārthasārathi Miśra explains: "Space is merely absence of an obstacle (āvaraṇābhāva) for the Sautrāntika. And 'absence' being nothing, space has not even a being (svarūpa): much less eternality".—So that absence of parts (avayavābhāva), as exemplified in space, contradicts the essence of the minor term (ātma, as something real) and the essence of the major term (eternality).

(iii) The doubtful reason (saindigdha)

PBh. p.238 1.20 ff. "The reason that is found in the Subject or minor (anumeye san), and is common (sādhāraṇa) both to that which is homogeneous with and to that which is not homogeneous with the minor (i.e. is found both in sapakṣas, XP's, and vipakṣas, Xnon-P's), is a 'doubtful' reason because it is the cause of doubt' (sandehajanakatvāt): for example, 'it is a cow, because it has horns' ".

¹The argument belongs to the controversy of abhihitānvayavāda sersus anvitābhidhānavāda. See NK p. 231 l. 24, and Faddegon's translation of the passage in his Vaikesika System p. 492.

This is the sādhāraṇa fallacy, which alone Praśastapāda classes as 'doubtful'. He does not subdivide it; but it admits of formal subdivision under four heads, as given in the Hetucakra-damaru, or in the Ślokavārttika; according as the middle resides (i) in all sapakṣas and some vipakṣas, (ii) in some sapakṣas and all vipakṣas, (iii) in some sapakṣas and some vipakṣas, (iv) in all sapakṣas and all vipakṣas.

The stock examples, as given in the *Hetucakra* and repeated in the *Slokavārtika*, are:—

(i) Sound is an effect of volition because it is noneternal.

(ii) Sound is a non-effect of volition because it is non-eternal.

(iii) Sound is eternal because it is corporeal.

(iv) Sound is eternal because knowable.

The Nyāyapraveśa list of six 'uncertain' i.e. doubtful reasons, is made up of the above four cases of the sādhāraṇa, together with (v) the asādhāraṇa, i.e. a middle which is found neither with sapakṣas nor with vipakṣas, but only in the pakṣa—as 'sound is eternal because audible': and (vi) the viruddhāvyabhicārin, or antinomy.

Praśastapāda will not admit that the asādhāraṇa can be a saindehajanaka, a cause of doubt; and therefore he introduces what seems to have been a novelty in classification, by setting up a fourth class, the anadhyavasita or reason which does not lead to a conclusion, to cover the asādhāraṇa. He further refuses to admit the virud-dhāvyabhicārin as a variety of the saindigdha, suggesting that it is either a case of the asādhāraṇa (and so anadhyavasita); or else non-existent. Kumārila clearly accepts the threefold classification 2 of the 'saṇsaya-

with contradictory qualities, found in one and the same thing".

^{&#}x27;or, because incorporeal.

281. Vārt., andmāna, 84, trayah samsayahetavah: sat sādhye, tadābhāve vā: dvābhyām vyavṛtta eva ca; dvau viruddhārthasambaddhau yāv ekatraikadesini. 'There are three doubtful reasons; either a reason found in P and non-P; or a reason excluded from both; or a pair of qualities joined

hetu' as sādhārana, asādhārana, and viruddhāvyabhicārin'; but he adds ' that although some reckon the viruddhāvyabhicārin as a separate class (jātyantara) others hold that the two reasons taken separately (amśena) form a case of sādhāraṇa; while taken together there is want of connection (ananvaya). Pārthasārathi Miśra explains the latter clause to mean that, taken together, the two reasons are a case of asādhāraṇa, for the reason that they are not found together in any other instance. This is Praśastapāda's view: and Kumārila may be referring to him here.

The example given by Kumārila is the antinomy 'Air is perceptible, because it is tangible', and 'Air is im-

perceptible, because it has no colour'.

(iv) The reason which does not conclude (anadhyavasita)

"Some argue that we see doubt PBh.p.238 1.23. arising when there is a falling together in one thing of two contradictory middle terms which have the characters described above (in the trairūpya), and that this is therefore another variety of the doubtful reason: as in the case of the two middle terms 'possession of movement' and 'intangibility' taken as proving the corporeality and the incorporeality of the 'mind'. Surely it will be said, this (the combination of possession of movement with intangibility) is just a unique (asādhārana) quality of 'mind', because the combined qualities do not occur in any other subject: like the two qualities of invisibility and perceptibility².—Yes, we reply: and it is for this reason that we shall designate it a case of a reason that does not point to any conclusion at all, an 'anadhyavasita' reason.

^{181.} Vārt., anumāna, 92-93.

 $^{^2{\}rm Sr\bar{i}dhara}$ explains that although these two qualities taken separately are found in other things as well as oualities, taken together they occur nowhere else except in quality, NK p. 242 ll. 1-2.

"But it will be said that in several places in the Vaiśeṣika-sūtra ambiguity of experience (ubhayathā darśanam) is asserted to be the cause of doubt.—This is not the case: doubt arises from experience of a pair of objects (viṣayadvaitadarśanāt samśayah): in other words, the cause of the arising of doubt is the experience of a pair of objects."

The question is, what is the distinction between ubhayathā darśana and visayadvaitadarśana in virtue of which the latter alone is held to be the cause of doubt? I think the distinction is clear enough from VS II.ii.17, and from the account of doubt which Prasastapada bases on this $s\bar{u}tra$. The sūtra runs: sāmānyapratyakṣād viścsāpratyaksād viścsasmrteś ca samśayah—" doubt arises from experiencing a common character, failing to experience distinctive characters, and remembering the distinctive characters ". You see an object marked by a certain relative tallness (which is common to a man or a post): you do not experience the distinctive features either of man or post: but you are reminded of both these (contradictory) characterisations by the common character. —The point is that a common feature, sādhāranadharma, implies a pair of objects to which it is common: and Prasastapāda emphasises this in his own definition by the use of a dual—prasiddhānekaviśesayoh sādršyamātradaršanād ubhayavišesānusmaraņād . . . ubhayāvalambī vimarsah (PBh.p.174 1.20).

^{&#}x27;Srīdhara (NK p. 242, 119 and l. 23) quotes VS II. ii. 18 and 19: but the interpretation of the whole passage VS II. ii. 17—22 has to be taken together; and Praśastapāda himself partially quotes II. ii. 22 a little below. It is indubitable that Vātsyāyana on NS I. i. 23 is referring to this passage in VS—he partly quotes and partly paraphrases VS II. ii. 22 at NBh p. 34 ll. 10-11. Faddegon pp. 174-5 notes this: but his suggestion p. 605 that VS II. ii. 22 is a later interpolation taken from Vātsyāyana's discussion seems to be baseless.—Praśastapāda's own account of doubt is at pp. 174-5 (samšananirūpaṇam). Srīdhara ad loc., p. 176 l. 13 quotes NS I. i. 23 remarking that the fivefold classification of doubt given in this sūtra of the 'samānatāntrika's' is covered by the classification which Praśastapāda gives.

Now the so-called 'ambiguity of experience' (ubhayathat darsanam) of which the opponent speaks in the case of an asādhārana dharma does not admit of this visayadvaitadarśanam: for the mark of the asādhārana dharma is that it is found nowhere else except in the subject. You have not experienced kriyāvattva plus asparšavattva as connected in one experience with mūrtatva and in another experience with amurtatva—there is no visayadvaita here. And therefore it cannot be brought under the rubric of doubt as laid down in VS II.ii.17. —This seems to me to be a real distinction. the antinomy ought to be classed as a case asādhārana dharma is another matter. But the opponent has made or accepted the identification. Praśastapāda shows now is that to treat the asādhārana as homogeneous with the $s\bar{a}dh\bar{a}rana$ is a confusion in classification. The latter generates doubt because it has been connected with contradictory experiences (visayadvaita M has been found with P in sapaksas and with non-P in vipaksas). It is a case of conflicting evidence. The asādhāraṇa is quite different for it excludes the possibility of experience which could provide evidence for either alternative. It is a case of absence of evidence. And complete absence of evidence suggests no view at all, and therefore cannot be said to generate doubt. There is nothing positive about it—at most it leaves us in doubt, as suggesting no conclusion at all (adhyavasāyain na karoti).

• Audibility does not suggest either that sound is eternal or that it is non-eternal, nor does the possession of smell suggest either that earth is eternal or that it is non-eternal. And, as suggesting neither alternative, such middle terms (i.e. asādhārana dharma's) cannot be causes of doubt (samšayahetu or samdigdha), but are

simply middles that fail to suggest any conclusion (anath-yavasita)¹.

PBh.p.239 1.7. "If the thesis and counter-thesis in the antinomy were equally strong, their mutual contradiction would prevent them from giving rise to conviction: but it would not constitute them a cause of doubt. But as a matter of fact they are not equally strong, because one or other Proposition 'anumeyoddeśa=either pratijñā or pratijñābhāsa, according as it is avirodhi or virodhi pp.133-4) will be sublated by scriptural authority (āgamabādhita): and then it will be a variety of contradicted thesis (i.e. a case of pratijñā-bhāsa)²".

Praśastapāda's position is that, no matter how you regard the 'viruddhāvyabhicārin', the classification of it as a sandigdha hetvābhāsa will be unjustifiable. You may treat it as a case of the asādhāraṇa: but in that case it will come under the head of anadhyavasita hetvābhāsa. If there is nothing to choose in favour of one rather than the other of the alternative conclusions the mutual contradiction does not generate doubt but merely leaves you unable to conclude. But as a matter of fact the so-called

the bādhita.

^{&#}x27;Srīdhara NK p. 242 l. 2 ff. gives the reasoning of those who maintain that the asādhāraṇa is a cause of doubt—saṇŝayaketutam eva. vyatirekiņo hi vipakṣād evaikasmād vyāvṛttir niyatā. tena pakṣe nirṇayahetutvam . . . asādhāraṇaṣya tu vyāvṛttir anaikātikī, vipakṣād iva saṇakṣād api tasyāḥ sambhavāt, etc. ''A genuine negative reason is excluded only from non-P, while the asādhāraṇa is excluded from P as well as non-F. So the possession of smell might as well be used to prove earth eternal as to prove it non-eternal. Both conclusions cannot be true by the law of contradiction: and both cannot be false by Excluded Middle. Therefore because of the possession of smell doubt arises as to whether earth is eternal or non-eternal''. He cites Kumārila (Sl. Vārt. anumānā 88) in support: also the Nyāyavārttika.

²and therefore, of course, is not to be classed as a samdigdhahetvā-bhāsa.—Praśastapāda's words are na car tayos tulyabalavattvam asti, anyatarasyānumeyoddeśasyāgamabādhitatvād, ayam tu viruddhabheda eva. See Keith ILA p. 141. But what Keith calls 'the contrary pure and simple,' must be understood to be, not the viruddhahetvābhāsa, but the virodhi anumeyoddeśa, i.e. a pratijūābhāsa. In the logic of Fraśastapāda's time the pratijūābhāsa teok the place of what was later treated as a hetvābhāsa, viz..

antinomy will be found to be a case of 'sublated thesis' in respect of one of its alternatives.

PBh. p.239 1.10. "And the middle term which is found in the subject (anumeya) but is absent in what is homogeneous with the subject as well as in what is not homogeneous with the subject, being non-proven in either direction is not a ground for a conclusion and is therefore designated the non-concluding reason (anadhyavasita); for example, the argument 'every effect is existent even before its origination, because it originates'. This 'asādhāraṇa' is included under the 'aprasiddho 'napadeśaḥ' (of Vaiśeṣika Sūtra III. i. 15)".

"And if it be objected that the viścṣa or asādhāraṇa dharma is stated (in Vaiśeṣika Sūtra II.ii.21 and 22) to be a cause of doubt (samśayahetu),—the answer is that this is not the case (na), since the sūtra has a different meaning $(any\bar{a}rthatv\bar{a}t)^3$.

"What you mean is that (on our view) the doubt as regards sound could not arise from experience of its peculiar property (our view being that such experience never generates doubt). And yet the $s\bar{u}tra$, II. ii. 22, says that doubt to whether sound is substance, quality or action arises viścṣasya ubhayathā dṛṣṭatvāt, i.e. from ambiguous experience of the peculiar property. The solution of this difficulty is that the viścṣa spoken of in the $s\bar{u}tra$ could not be audibility as the peculiar property of this that or

¹anyatarāsiddha. This term is used elsewhere as the name for one variety of the asiddha-hetvābhāsa. But it cannot be taken in this sense here. Śrīdhara (NK p. 244 l. 25) says, apparently in explanation of this, naikatarapakṣādhyavasāyam karoti. anyatarāsiddha must be taken accordingly in an unusual non-technical sense, as above rendered. (cp. Keith, ILA p. 149 footnote. Bhāsarvajās is perhaps echoing Praśastapāda's use of anyatarāsiddha in this connection.)

²See above p. 191 for the interpretation of this sūtra.

^{*}The punctuation in the text is wrong. It should be: nānyārthatvāt. *abde višeṣadaršanāt samšayānutpattir ily ukte, etc.

^{&#}x27;śrāvanatva is Praśastapāda's substitute for the srotragrahano yo 'rthah sabdah of VS II. ii. 21.

the other particular substance, quality or action; but on the contrary turns out to be neither more nor less than a common character pertaining to all. You may ask on what grounds we say this.

"The answer is given in Vaiseṣika Sūtra II.ii. 22 which says that the possession of a peculiar property (such as audibility is) is not confined to one category alone (e.g. quality), but is found in each one of the three categories of substance, quality and action (so that the argument 'sound is quality because it possesses a peculiar property, viz., audibility, would be open to the objection that the middle term, 'possession of a peculiar property', is ambiguous—ubhayathādṛṣṭa—in the sense that it is found both in sapakṣa's or tulyajātīya's, i.e. in other qualities, and also in vipakṣa's or ārthāntarabhūta's, i.e. in substances and actions)².

'Stidhara NK p. 245 ll. 12—18 elucidates this passage as follows: 'After explaining sound in II. ii. 22 as the object of the organ of hearing the sātrakāra says there is a doubt whether sound is substance, quality or action. . The opponent here says 'when you say that this doubt arises with regard to sound which is the object of the organ of hearing, you mean that it is just the fact of being the object of hearing that is the ground of this doubt: and the fact of being the object of hearing is the viseşa, the peculiar property of sound. But from the experience of this peculiar property doubt cannot arise. For doubt has as its condition the remembrance of both conflicting properties. And remembrance does not arise from experience of a peculiar property, an asādhārana dharma, because it is never found together with any peculiar property whatever'. In reply to this objection of the opponent, the sātrakāra has given this rejoinder which Prašastapāda expresses in the words nāyam dravyādīnām anyatamasya višaṣaḥ, etc.''

²As Śrīdhara expresses it (NK p.º 246 l. 1) "the possession of a viseṣa as such (viseṣatvena rāpeṇa) is neither more nor less than (eva) a character common (sāmānya) to substances qualities and actions: and so in this aspect (tena rūpeṇa) it is rightly considered to be a cause of doubt. But in its aspect as asādhāraṇa dharma it is not a cause of doubt, because it does not call to mind different alternatives". And again 1. 7: "What does it mean? It means that distinctive characters, viseṣa's, are seen alike in substances, qualities and actions. Now a distinctive character—audibility—is seen in sound. Therefore, from its being a distinctive character, a doubt arises—a doubt embracing substance, quality and action. But if its asādhāraṇa aspect also were a cause of doubt, then there would be the undestrable consequence of doubt arising from the distinctive characters of the six categories themselves, since each of these has its asādhāraṇa dharma : and the result would be that doubt would stop nowhere."

"Audibility as such is not cause of doubt. If it were, the undesirable consequence would follow that doubt would arise in the case of the six categories (from their distinctive characters). Therefore it is only from the thought of a common quality that doubt can arise."

SECTION 6. FALLACIES OF PROPOSITIONS; AND FALLACIOUS EXEMPLIFICATION

The recognition of these classes of fallacies other than $hetv\bar{a}bh\bar{a}sa$'s or fallacious middle terms appears to be characteristic of the period represented by Praśastapāda and the $Ny\bar{a}yaprave$ śa. The fallacies of the Proposition and of the Example were quite unknown to Vātsyāyana and the early $Ny\bar{a}ya$, and were rejected by Uddyotakara.

• The fallacies of the proposition are represented by the $b\bar{a}dkita$ class of $hetv\bar{a}bh\bar{a}sa$ in the later schools: while the fallacies of the example may be found in the asiddha class as expounded by later logicians $(vy\bar{a}pyatv\bar{a}siddha)$. Here, as in other details of logic, Kumārila accepts, with modification of the school o

fications, the teaching of Prasastapāda.

(i) Pratijñābhāsa. Fallacies of the Proposition

Praśastapāda, having defined the Proposition as a statement of a *probandum* which does not involve

Faddegon translates this passage of the Bhāsya at pp. 306-7 of his Vaisestka System: but I think he misses the meaning of it, in part.

Faddegon (Vaisesika System, p. 324) says that the argument of this passage in Prasastapāda's Bhāṣya has been misunderstood by Stcherbatsky; but Stcherbatsky's remarks (quoted by Faddegon, p. 323) seem to me to give a correct account of the passage; except in his suggestion that the argument here discussed by Prasastapāda. sabdo gunah srāvanatvāt, might better be expressed sabda itarebhyo bhidyate srāvanatvāt: for the latter is quite a different argument, and one which Prasastapāda does not consider at all,—it belongs to a later phase of formalism when the controversy as to the kevalānvayin and kevalavyatirekin had arisen. But, as Stcherbatsky rightly points out, "Prasastapāda ne mentionne ni le kevalānvayin ni le kevalavyatirekin". The distinction was unknown to the logic of his time. Stcherbatsky's inference that he regarded them as fallacious is therefore out of place. [Keith's statement (ILA p. 142) that "Prasastapāda appears to admit the truth of the argument sound is a quality because it is audible', or 'sound differs from other things because it is audible'", is a mistake.]

contradiction (anumeyoddeśo 'virodhi), proceeds (PBh.p. 234 l. 3). "As the result of inserting into the definition the condition 'not involving contradiction', those apparent or fallacious Propositions are excluded which contradict (i) perception, (ii) inference, (iii) what has been accepted, (iv) one's own śāstra, (v) one's own words";

The Nyāyapraveśa² gives a ninefold division, composed of these five with four others. The Slokavārt-tika³ gives an independent classification.

PBh. p. 234 l. 4. "Examples are:—

- (i) Fire is cool. This is contradicted by perception.
 - (ii) Physical space is dense. This is contradicted by inference⁴.
 - (iii) Intoxicating liquor is to be drunk by a Brāhmaṇa. This is contradicted by scripture.

'abhyupagata. The meaning is that your position is contradicted by the very authority which—for the purpose of your argument—you are accepting. See note 5. Vidyābhūsaṇa's rendering of the rubric in the Nyāyapraveśa which apparently corresponds to this is 'a thesis incompatible with public opinion'. See Fragments from Diùnāga, Appendix I. Sugiura p. 60 translates the corresponding head from the Hetudvāraśastra "contrary to the public understanding" the example being "women and money are aboninable things", i.e. a mere paradox.

#Dinnaga's list from the Hetudvārašāstra as given by Sugiura pp. 60-61 very closely agrees.

²Vidyābhūsaņa HIL. pp. 290-291 = MSIL pp. 90—92. Uddyotakara NV pp. 116-117 criticises examples given in the $Ny\bar{u}yaprave\acute{s}a$, and appears to approve of Praśastapāda's example of 'class (iii), as contrasted with the Bauddha example.

³anumānapariccheda, verses 52—75.

'ghanam ambaram. Srīdhara says that the means of knowledge by which $\bar{a}k\bar{a}sa$ is known establishes it to be eternal and without parts. Therefore the Proposition that physical space or ether is without interstices contradicts the very inference which establishes the existence of the Subject itself, i.e. of 'ether'. NK p. 236 l. 22.

 $^5\bar{a}gamavirodh\bar{\imath}$ here, but abhyupagatavirodh $\bar{\imath}$ above. In the Nyāyas praveša this heading is translated 'a thesis incompatible with public opinion', the example given being 'man's head is pure because it is the limb of an inanimate being'.

- (iv) Effects are existent before their origination. This, when put forward by a Vaišesika, is contradicted by his own sāstra '' (which maintains asad utpadyate, i.e. the asatkār yavāda, origination of the non-existent. This can be treated as a case of self-contradiction).
- (v) "Words do not convey any meaning. This is a self-contradictory statement" (since if it were true this very sentence could not be used to convey a meaning. The example in the Nyāyapravcśa is: "My mother is barren").
- But as neither Bauddha nor (strictly speaking) Vaisesika accepts authority or 'credible testimony' as an independent source of knowledge, there would seem to be no place for this class of fallacious proposition in either system. But in practice both Bauddha and Vaisesika accept the authority of scripture, so that the difficulty should not be allowed to have too much weight.—Srīdhara however seems to feel a difficulty, and meets it by characterising this type as drstāntagrāhakapramānavirodha, contradiction of the source of knowledge from which the reasoner has derived the facts to which he appeals (this characterisation is however too wide, for it would cover the first type also, contradiction of perception). According to his analysis the reasoner appeals to scripture—"the scripture says there is no harm in drinking milk. What harm then in drinking wine?"—The answer is that the very same scripture which allows the Brahman to drink milk forbids him to drink wine. If you appeal to scripture in the matter of milk-drinking, you must not contradict it (for it is abhyupagata, accepted by you) in the matter of wine-drinking. (NK pp. 236 last line—237).

Treated thus, this example becomes a case of self-contradiction, like the fourth and fifth types: which are opposed by Srīdhara to the first two types, in which the proposition contradicts, not merely your own tenets or words (which may be false), but a source of valid cognition. In the first two types the contradiction proves the falsity of the Proposition: in the last two it is merely a proof of inconsistency. See next note. But Srīdhara does not class the third type with the last two, as he ought to do on his own analysis of it: which suggests that he thinks that Prašastapāda's third class really ought to be treated as a case of pramāṇavirodha, like the first two. As a Naiyāyika, Srīdhara would of course treat it so: but as a commentator on Prašastapāda he feels it difficult to do so. See next footnote also,

be reduced to the first two, but replies that a sāstra (e.g. that of the Bauddhas) may be based on merely fallacious proofs (pramāṇābhāsa), in which case contradiction of the sāstra would not be pramāṇavirodha, i.e. could not be classed under either of the first two heads. And the same applies to contradicting one's own statement: for one's own statement may

Four additional varieties are mentioned in the $Ny\bar{a}$ yapraveśa :---

(vi) A thesis with an unaccepted minor.

(vii) A thesis with an unaccepted major.

(viii) A thesis with both terms unaccepted.

(ix) A thesis universally accepted, such as 'fire is warm'. Indian logic always insists on the fact that there can be no sādhya or probandum without siṣādhayiṣā or the desire to prove. And there can be no desire to prove truisms.

Kumārila similarly states that inference is inapplicable (i) where the thing is already known to be so, and (2) where the contrary is already known to be the case. He goes on to say that any of the six means²

be apramānamūla, in which case the contradiction of it would not amount to pramanavirodha. That is, he regards both these heads as cases of self-

contradiction merely.

*Vidyābhūṣaṇa's account has here been corrected from Sugiura, p. 61:—
'The next four fallacies of the Thesis are not found in Dinna's'' (i.e. Dinnāga's) "work but only in Sankara's" (i.e. in the Nyāyapraveśa, which Chinese authority attributes to Samkara Svāmin). "This is one of the very few additions made by later philosophers to Dinna's system. It will be remembered that Dinna said: 'The terms used in the Thesis must be accepted by all': . . . Upon this principle of Dinna's teaching Sainkara developed the following:

(vi) If, a disputant wishes to prove that God is almighty, and if his opponent questions the very existence of God, then the Thesis is not a fit subject of proof until at least God's existence is admitted by the opponent.

Such a Thesis is called a Thesis with an unaccepted subject.

(vii) If the predicate of the Thesis is in question, the Thesis is said to be one with an unaccepted predicate.

(viii) And if both subject and predicate are questioned, then the Thesis is one with both parts unaccepted."

These three fallacies are therefore three cases of the fallacy of many questions.

The latter Vāst. anumāna, 56-57. couplet is quoted Śrīdhara in the present context, NK. p. 236 l. 10-

vaiparītyaparicchede nāvakašah parasya tu

mule tasya hy anutpanne purvena visayo hṛtah.

"Where the opposite is definitely known there is no room for a subsequent or second proof, since its object is sublated by the previous proof before the premises of the latter proof come into being".

2i.e. perception, inference, testimony, analogy, presumption, non-existence. Sec p. 305 below.

of proof can in this way sublate a subsequent attempt at proof.

There are obvious difficulties in the conception of a fallacious Proposition (pratijnābhāsa) or fallacious Thesis (pakṣābhāsa), as there are in its later equivalent the Sublated Reason (bādhitahetvābhāsa, bādhitaviṣayatva). Śrīdhara raises the general objection to the conception: "There cannot be sublation of an inseparably connected (avinābhūtasya) middle term, because sublation and inseparable connection are mutually contradictory. this objection we reply that if the 'three characteristics of the middle' are accepted as constituting inseparable connection (yadi trairūpyam avinābhāvo 'bhimatah) then there is (asty eva) sublation of an 'inseparably connected' middle term: for instance there is sublation (by perception) of the argument 'fire is not warm, because it is a product'. But if by saying that there is no sublation of an inseparably connected middle you mean that the 'three characteristics of the middle term' when the object is not sublated constitute inseparable connection, then of course we should agree that there is no sublation of an inseparably connected middle2".

The reading of the text is atha bādhitarisayatve sati trāirūpyam avinābhāvah: but the variant yathā for atha is noted. The variant gives the clue to the true reading, which I think must be athābadhitarisayatve sati, etc. I have rendered in accordance with this conjectural restoration of the text.

²NK p. 236 ll. 13—16. Cf. p. 205 l. 7:— idam anenārinābhūtam iti jñānam yasya nāsti tam prati dharmiņi dharmasyānvayavyatirekavatopi lingatram na vidyate. It seems clear that for Srīdhara the 'three characteristics of the middle' could not alone, guarantee avinābhūra or inseparability of connection.

But how can it be said that, judged merely by the canon of the trairūpya, there is 'inseparable connection' between 'being a product' and 'being not-warm' in the argument 'fire is not-warm, because it is a product'?—The answer apparently is that the middle 'being a product' is found present in sapakṣa's, i.e. cool things, such as wat r and is found absent in vipakṣa's, i.e., warm things, such as atomic fire-particles (of course it will be strange to maintain that, whereas fire-atoms are warm, fire-composites are cold. But then the thesis itself is strange, and the person who maintains it will be driven to strange devices). And this argument fulfils

'pañcarūpopapannatva' doctrine of the later schools—that in addition to the 'three characteristics' a valid reason must also be characterised by having a subject-matter which is neither counterbalanced (satpratipakṣa) nor sublated ($b\bar{a}dhita$)—does not belong to the phase of logical thought represented by Praśastapāda and by the $Ny\bar{a}ya-praveśa'$.

(ii) Nidarśanābhāsa. Fallacies of Exemplification

"Exemplification has two forms according as it is through similarity or dissimilarity. Exemplification through similarity consists in showing the constant accompaniment of the general nature of the Mark by the general nature of the *Probandum* or major term(anumeya-

the condition of the trairūpya, if the trairūpya is read without the restrictive 'only' in the second and third clauses. And Srīdhara may have relied on Uddyotakara's critique of the trairūpya (for the present purpose) as proving that the restrictive 'only' cannot be introduced into the trairūpya without making nonsense of it.

At any rate I can find no other way of making sense c what Srīdhara says here. His position only amounts to this after all: if your thesis is not inconsistent with facts, the evidence will be good enough to prove it without being required to satisfy the impossibly ideal condition that M is found only in sapakṣa's (P's) and never in vipakṣa's (non-P). (Impossibly ideal, because you cannot hope to prove an only or a never by evidence). If on the other hand your thesis is inconsistent with facts you may (and sometimes can) adduce evidence both positive and, negative in support of it: but it will be perfectly worthless, because the thesis is already disproved before you set out to prove it.

The obvious retort to the position is that, if the thesis is already disproved, it is disproved by facts: and these facts will as a matter of fact constitute counter-evidence which will *Lisprove* the opponent's assumption that his evidence satisfies the ideal conditions of never and only. For though it may be impossible to prove an only or a never, a single contradictory instance is enough to disprove either. Why not then class what Praéastapāda calls a 'sublated thesis' under the head of hetvūbhūsa, fallacious middle, either as virūddha or as anaikāntika? For it is always reducible to one or other of these two heads.

I think Sridhara has misunderstood the intention of pratijnābhāsa, which was merely intended to put ridiculous propositions out of court without further argument. And this is the only practical way of dealing withnessense.

'How completely the later doctrine of bādhitahetvābhāsa corresponds to the earlier doctrine of pratijāābhāsa will appear from comparison of the Nyāyasāra's sub-division of bādha (given by Vidyabhūsana HIL p. 367. cp. p. 440 for the Tattvacintāmani's classification).

sāmānyena lingasāmānyasyānuvidhānadarśanam): for example, 'what possesses movement is found to be a substance,—like an arrow'. Exemplification by dissimilarity consists in showing that in the contrary of the *Probandum* there is absence of the Mark: for example, 'what is not substance does not possess movement,—like the universal 'Being'.'

The six fallacies of similar Exemplification

PBh. p. 247 l. 1. "By this account of Exemplification are set aside, as, in the argument Sound is eternal, because it is incorporeal, the exemplifications:—

What is incorporeal is found to be eternal,—

- (1) like an atom (atoms are not incorporeal)
- (2) like movement (movement is not eternal)
- (3) like a pot (pots are neither incorporeal nor eternal)
- (4) like darkness (darkness is nothing)
- (5) skylike (a bare example without statement of connection) and
- (6) 'what is substance, possesses movement' (an inverted statement of connection).

These six fallacies of exemplification through similarity are designated as—

- (1) having the middle non-proven—lingāsiddha.
- (2) having the *probandum* non-proven—anumeyā-siddha
- (3) having both the middle and the major non-proven—ubhayāsiddha
- (4) having the substrate non-proven—āśrayāsiddha²

^{&#}x27;Translated above. I insert it here in order to supply the connection of thought.

²There is an unfortunate repetition of the phraseology used in naming the varieties of the 'asidha hetvābhāsa'.

- (5) want of connection—ananugata
- (6) inverted connection—viparītānugata.

Fallacious Exemplifications by dissimilarity are-

- (7) not excluded middle (lingāvyāvṛtta)
- (8) not excluded major (anumeyāvyāvṛtta)
- (9) neither middle nor major excluded (ubhayāvyāvṛtta)
- (10) having an unreal substrate (āśrayāsiddha)
- (11) failure of exclusion (avyāvṛtta).
- (12) inverted exclusion (viparītavyāvṛtta).

Illustrations are the following:—

'What is non-eternal is found to be corporeal,—

(7) like action (does not exclude the middle, i.e. incorporeal. "Action is not an example of the non-incorporeal)

(8) like atoms (does not exclude the major, i.e. eternal. Atoms are not an example of the

non-eternal)

- (9) like ether (excludes neither incorporeal nor eternal, i.e. it is an example neither of the non-incorporeal nor of the non-eternal)
- ·(10) like darkness (the example is not a real thing)
- (11) jar-like (bare example, without statement of necessary exclusion of middle, i.e. incorporeal from non-eternal, i.e. the negative of the major. The bare example of the jar does not carry with it the truth that all non-eternals are corporeal)

(12) 'what is without motion is not substance' (the required concomitance is that 'what is not

substance is without motion').

[Instead of excluding the middle 'possessing motion' from 'non-substance,' the negative of the major, you have excluded the major from the negative of the middle.]

The interesting varieties here are Nos. 5 and 6, and the corresponding Nos. 11 and 12. Nos. 6 and 12 accord with the fact that Prasastapāda (and with him the author of the Nyāyapraveśa, who gives a list corresponding except that it omits the āśrayāsiddha, Nos. 4 and 10) had fixed the form (vidhi) of the nidarśana as a 'major premise' Similarly Nos. 5 and 11 indicate the requirement of a ryāpti or avinābhāva, a necessary connection between the attributes exemplified in the concrete instance or dṛṣṭānta¹.

Note on the number of the Fallacies in Buddhist logic

Sugiura (p. 58) states that Sankara Svāmin recognised 33 fallacies,—nine of the thesis, fourteen of the reason, and ten of the example. "But if we consider the combinations of the fallacies of which a syllogism may be guilty, the number is greatly increased. Of this kind the Thesis is said to possess 9216, the Reason 117, the Example 84, in all then 9417 fallacies". (This appears to be the teaching of Kwei-ke's Great Commentary, not of the Nyāyapraveśa itself).

Dinnāga did not recognise the last four of the fallacies of the Thesis given in the Nyāyapraveśa, and

Prasastapāda's ananugatanidarsanābhāsa and avyāvṛttanidarsanābhāsa, as interpreted by Śrīdhara, consist in failure to state the vyāpti. The corresponding head in the Nyāyapravasa consists in a failure of vyāpti. Dharmakīrti provides a place for both failure to state the vyāpti, and failure in the vyāpti itself, under two separate rubrics—ananvaya and apradarsitānvaya: and this distinction between form and matter is also made by Kumārila, whose list otherwise corresponds with Prasastapāda's. Dharmakīrti further increases the Nyāyapravesa list of ten (five and five) nidarsanābhāsas to eighteen (nine and nine) by adding three classes where the major, the middle, and both are doubtful. See Nyāyabindu pp. 166-7 and Vidyābhūṣaṇa H1L pp. 314-5.

The udāharaṇābhāsa perhaps does not figure in any Naiyāyika work except the tenth century Nyāyasāra of Bhāsarvajña—a work which deviates from the accepted Naiyāyika teachings in other respects also. It gives what is practically identical with Frasastapāda's list of twelve (six and six): but adds that eight (four and four) others are recognised, in which the major, middle, both, and substrate are doubtful.

therefore it would seem that his list of fallacies must have been limited to 29. Sugiura states the principle of division of the fourteen fallacies of the reason (p. 62): "Dinna enumerated fourteen fallacies of the Reason. These he classed into three groups with reference to the phases of the Hetu. The first four are those which are defective in the first phase of the Hetu, the next six are those which are defective in either the second or the third phase, and the last four are those which are defective in both the second and the third phases'. (By the 'phases' of the Hetu is meant the three clauses of the trairupya. The asiddha breaks clause I, the aniścita breaks either II or III, the viruddha breaks both II and III). From this it is clear that Dinnaga recognised the asiddha, though it is ignored in the *Hctucakra*. Of the remaining ten fallacious reasons the wheel provides a place for seven which depend on the formal relations of the middle to the sapaksa and vipakṣa (i.e. roughly speaking, to the major): but only six of these figure in the list of 14 fallacies of the The four not accounted for in the Wheel (other than the four asiddha) are the three varieties of viruddha where the middle is inconsistent with the minor, with the implications of the minor, and with the implications of the major; and (among the aniscita) the antinomic reason or viruddhāvyabhicārin.

Sugiura (p. 70) notes that Dinnāga "enumerates 14 fallacies which may be committed in the course of disproof of a valid Thesis . . . These fourteen fallacies Dinna ascribes to Soemock". 'Soemock' is without doubt Akṣapāda (see Sugiura, p. 21 n. 3), and these fourteen fallacies of disproof (dūṣaṇābhāsa) are nothing but an abbreviated list of the 24 jātis of Nyāyasūtra Bk. V.i., as is quite clear from the account given by Sugiura (pp. 23—26). He adds that the fourteen 'fallacies of refutation' (i.e. jāti) are not mentioned in Saṃkara's Praveśa-tarka-śāstra (i.e. in the Nyāyapraveśa). This is in accordance

with the practical ignoring of Bk. V of the Nyāyasūtra by Indian logicians from the time of Prasastapāda onwards.

SECTION 7. SYLLOGISTIC. THE 'WHEEL OF REASONS', OR THE NINE VALID AND INVALID TYPES OF SYLLOGISM

Dinnāga in the Pramānasamuccaya¹ gives a formal scheme of nine valid and invalid types of inference which appears to be the earliest specimen of formal 'syllogistic' in Indian logic². The scheme is a corollary of the second and third clauses of the trairūpya³, that is to say it is a statement of all possible relations in which the reason or middle term may stand to positive examples (sapakṣas, XP's) on the one hand, and to negative examples (vipakṣas, X non-P's) on the other hand. The middle term may be found in all, some, or none of the positive examples: and again in all, some, or none of the negative examples. The combination of these two sets of possibilities gives rise to the Nine Types:—

I. All XP's are M. and All X non-P's are M (i.e. the hetu is sapakṣavipakṣavyāpaka⁴),

¹The passage is quoted in full by Vācaspati Miśra in NVT p. 198. It will be found in Fragments from Dinnāga, pp. 29—33.

²Praśastapāda makes no reference to this scheme, nor to any other scheme of valid and invalid 'moods'. It might seem that he would have referred to this piece of formalism if it had been known to him: and this gives some support to the view which makes Praśastapāda earlier than Dinnāga.

But on the other hand, Prasastapāda does note the two valid forms of syllogism—and it may be argued that this implies the kind of formal scheme set out by Dinnāga.

The first clause of the trairūpya—anumeye sattram—is ignored in the scheme: that is, the relation of M to S, pakṣadharmatā, is ignored, so that what was later called the asiddha hetrābhāsa, i.e. the middle which is fallacious because it does not reside in S, finds no place in the scheme. Moreover what appears to be the closing line of this fragment cited by Vācaspati seems to state the principle on which it is ignored—viz., that true and fallacious reasons in general are alike 'pakṣadharma', i.e. reside in S.

The convenient Sanskrit formulae for the various types of syllogism and paralogism are those used by Uddyotakara: except that I have substituted the more familiar 'sapakṣa' for Uddyotakara's 'tajjātiya', i.e. sādhyajātiya,

- e.g. 'Sound is eternal because an object of knowledge'.—But all the noneternal things that can be adduced as examples, as well as all the eternal things, are 'objects of knowledge'. Therefore the argument is inconclusive (aniścita, samdigdha. It belongs to the sādhāraṇa or 'too general' variety of the saryabhicāra or anaikantika hetvābhāsa).
- II. All XP's are M, and No X non-P's are M (sapakṣavyāpaka vipakṣāvrtti), e.g. 'Sound is non-eternal because a product'. VA-LID.
- III. All XP's are M, and some X non-P's are M (sapakṣavyāpaka vipakṣaikadeśavṛtti), e.g. 'Sound is an effect of volition, because non-eternal'.—But some things which are not effects of volition are non-eternal, e.g. lightning. Inconclusive (aniścita).
- IV. No XP's are M, and All X non-P's are M (sapakṣāvṛtti vipakṣavyāpaka), e.g. 'Sound is eternal because produced'. But there is no example of an eternal thing that is produced; and all examples of non-eternal things are products. Contradictory, since the evidence proves the contrary conclusion in the valid type No. II. It is a breach of both the second and the third clauses of the trairūpya.
 - V. No XP's are M, and No X non-P's are M (sāpakṣavipakṣāvṛtti), e.g. 'Sound is non-eternal, because audible'. There are no examples other than S in which M is

- present. The evidence is confined to cases of non-M; and although this is found in all examples of non-P (so that the third clause of the *trairūpya* is satisfied), it is also found in all cases of P, so that the second canon is not satisfied¹.
- As satisfying only one of the two latter canons the argument is *inconclusive* (aniścita). The asādhāraṇa or 'too restricted' variety of the savyabhicāra hetvābhāsa, according to the later classification. But Praśastapāda classes the asādhāraṇa as anadhyavasita, a reason based on no evidence at all, and refuses it the name of aniścita—sanidigdha—a reason based on conflicting evidence.
- V1. No XP's are M, and some X non-P's are M (sapakṣāvṛtti vipakṣaikadeśavṛtti), e.g. 'Sound is eternal, because an effect of volition'.—But there are no examples of eternal things which are effects of volition; and, on the other hand, some (though not all) non-eternals are effects of volition, e.g. a pot is so, though lightning is not. The argument breaks both the second and the third Canons: and it is Contradictory since

^{&#}x27;or, as Uddyotakara would put the objection to this argument, the negative evidence is conflicting—raidharmyain ryabhicarati, i.e. non-M is P as well as non-P. For Uddyotakara holds that in this particular case (i.e. where the hetu is an asādhāraṇa dharma, so that no positive evidence is available) an argument which satisfies the third canon can be valid without satisfying the second, provided the negative evidence all points in one direction, i.e. provided that all the non-M's are non-P. Under this condition the asādhāraṇa dharma can be a valid reason (belonging to the type which he calls avīta or vyatīrekin), and which the later schools recognise as kevalavyatīrekin. In his phraseology the hetu need not always be a trilaksaṇahetu, i.e. it need not always satisfy the three canons of syllogism: for the kevalavyatīrekin is valid although it is only dvilakṣaṇa or dviṇadayukta, i.e. satisfies only two canons, viz., the first and the third.

VIII.

the evidence proves the contrary conclusion in the valid type No. VIII.

Some XP's are M, and All X non-P's are M. VII. (sapakṣaikadeśavṛtti vipakṣavyāpaka), e.g. 'Sound not an effect of effort, because noneternal'. It is true that some things which are not effects of effort are non-eternal, e.g. lightning, so that the second canon is satisfied: but on the other hand all things that are effects of volition are non-eternal, e.g. a pot (all X non-P's are M), so that the argument breaks the third canon which says that all X non-P's must be non-M. It is inconclusive.

Note.—It is not classed as contradictory, because the evidence will not prove the contrary conclusion, but will only lead to the equally inconclusive inference of the contrary in type No. III. This amounts to saying that the argument is not classed as contradictory, because it does not break two canons but only one.

Some XP's are M, and No X non-P is M (sapaksaikadeśavrtti vipaksāvrtti), e.g. 'Sound is non-eternal, because an effect of volition'. For some, though not all, non-VALID. eternal things, e.g. a pot, are effects of volition; while no eternal things are effects of volition, e.g. ether. So that both canons It differs from the other are satisfied. valid type, No. II, because there the reason was sapaksavyāpaka, resident in all XP's. But it is not necessary to the validity of an argument that M should reside in all XP's: or, as we should put it, it is not necessary that 'all P should be M'-all we need is that 'all M should be P'.

IX. Some XI's are M, and some X non-P's are M (sapakṣavipakṣaikadeśavṛtti), e.g. 'Sound is eternal because it is corporeal'—But although some eternal things are corporeal, e.g. atoms (others, e.g. ether, not being so), it is not the case that no non-eternal things are corporeal—for, although some non-eternal things are not corporeal, e.g. action, other non-eternal things are corporeal, e.g. a pot. That is, though the argument satisfies the second canon, it breaks the third. It is therefore inconclusive—differing from No. VII only in this respect that the equally inconclusive inference of the contrary would be in this same type and not in a different type.

To sum up this 'Wheel of Reasons'. It gives (1) two types which are valid as satisfying both the second and the third 'canons': (2) two types which are contradictory as satisfying neither canon and so admitting proof of the contrary in one or other of the two valid types: (3) five types which are inconclusive as satisfying only one of the two latter canons. Four of these inconclusive syllogisms satisfy the second canon, i.e. they argue from positive evidence. The fifth—the asadhāraņa or too restricted reason—cannot satisfy the positive canon because from the nature of the case there is no positive evidence available in favour of either alternative. From the nature of the case, again, it cannot help satisfying the negative canon—S being the only M, there cannot be any X non-P which is M. But (if there are any XP's adducible1) it will be equally true that there cannot

This is Uddyotakara's proviso. Dinnaga makes no proviso and so treats all arguments which satisfy only the third canon as invalid. See last note, and page 241 below.

be any XP's which are M—so that the negative evidence will point in the direction of both alternatives equally, and the argument will be inconclusive.

The salient difference between this Wheel of Reasons and the Barbara Celarent of western formalism is that the latter starts from the major premise and ignores the evidence for it; while the former starts from the evidence and formulates the types of syllogism as determined by the kinds of evidence which may be adduced in support of the conclusion. In other words the Indian logician is concerned with the relation of M to sapaksas and vipaksas, XP's and X non-P's, while the western schoolman deals with the relations of M to an abstract P. The 'example' therefore is not an unfortunate excrescence on the Indian syllogism, but essential to it, at least so long as it preserved its original character. When the conception of a ' vyāpti' of M by an abstract P begins to overshadow the Exemplification ' (nidarśana, udāharaṇa), the distinction between the Indian and the Aristotelian syllogisms begins to be blurred: for the udāharaņa tends then to assume the nature of a 'major premise', and the example begins to look like an excrescence: and there is even the commencement of a development, out of the notions of vuānua and vuānaka, of something that might have become a quantitative logic.

The 'form' of the nidarśana, and the notions of vyāpya and vyāpaka.

It may have been Kumārila who developed on these lines the implications of the 'vidhi' or 'form' laid down in the logic of Praśastapāda's age for the nidar-śana. Kumārila' insists that the object of the example is to convey 'the pervasion of the middle by the major term' (vyāptim gamakasya gamyena—NRA on 107); and that this 'pervasion' can only be conveyed by

¹Sl. Vārt., anumāna, 107-111.

a definite order of the terms (racanāviścsa—NRA), the middle being the subject (uddesya) and the major the predicate. The subject is the vyāpya or pervaded while the predicate (major term) is the ryāpaka or pervader. The mark of the subject is that the relative ' yat' is attached to it, and that it is stated first. The mark of the predicate is that the correlative * tat ' is used with it, and the particle eva. Eva by its restrictive force, being attached to the predicate or major term, 'distributes' the subject or middle term. And thus we have what is equivalent to our 'All M is P' as the necessary form of the nidarśana,—which can now fairly be called a ' major premise'. The quantitative implications in the notions of vyāpya and vyāpaka are clearly set out by Kumārila: no yasya desakālābhyām samo nyūno ' pi vā bhavet sa vyāpyo, vyāpakas tasya samo vā 'bhyadhiko' pi vā, tena vyāpye grhīte 'rthe vyāpakas tasya grhyate na hy anyathā bhavaty esā vyāpyavyāpakatā tayoh. vyāpakatvagrhītas tu vyāpyo yadyapi vastutaķ ādhikye 'py aviruddhatvād vyāpyam na pratipādayet.

(Sl. $V\bar{a}rt.$, anumāna, 5—7).

"The pervaded is what has equal or less extension in space and time: its pervader is what has equal or more extension. This means that when the pervaded thing is apprehended, its pervader is apprehended: for not otherwise would the relation of pervaded and pervader hold between the two. And although the pervaded be (sometimes) grasped as pervading (its pervader), in as much as in reality there is not the contradiction [which arises when the "pervader" is also actually greater in extension],—still, it would not cause the pervaded to be inferred".

i.e., we can infer from M to P, but not from P to M. If S is M, then it is P: but if S is P, it is not necessarily M.

The last couplet is difficult, but may be interpreted to mean that though sometimes M may be convertible with P (the proposition M is P being equipollent, so that there is no contradiction in saying that all P is M, as there would be in case P overlapped M in extension ādhikye), still, when we do thus argue from P to M, "P" is no longer the $vy\bar{a}paka$ or major term, nor can we be said to argue from " $vy\bar{a}paka$ " to the " $vy\bar{a}pya$;" from the "major" to the "middle". P is now our $vy\bar{a}pya$. or middle, and we argue from it to M as our major, or vyāpaka¹.—This last couplet is quoted by Srīdhara² in dealing with Prasastapāda's account of the viparītānuaata-nidarśanābhāsa). ''In the argument 'wind is substance because it possesses movement, the possession of movement is the pervaded and the being substance is the pervader. And a universal connection or 'pervasion' (vyānti) is restricted to what is pervaded, solely (yac car vyāpyam tadekaniyatā vyaptih), and does not, like the relation of conjunction or contact (saniyoga), attach to both terms; for the reason that the pervader overlaps the pervaded. And even where two terms such as 'being a product ' and ' being non-eternal ' have mutual universal connection or are equipollent (samavyāptika), so that the pervaded is also pervader, even here the universal connection refers to a term in the aspect of pervaded, and not in the aspect of pervader: because the latter aspect may also belong to a term which is wider in extension. the teacher (guru, i.e. Kumārila) points out in the couplet vyāpakatvaarhītas tu etc.''3

li.e., M is P, S is P, \therefore S is M. There is no contradiction because P is not as a matter of fact greater in extension than M, in the case supposed.—But then P becomes the real 'vyāpya'. That is to say the true form of this argument is P is M, S is P, \therefore S is M. As we should put it, it is formally invalid in the Second Figure.

²NK p. 248 l. 9, The second line is quoted here in the form ādhikyē in viruddhatvāt, etc.

^{*}WK p. 248 ll. 4—9. It is perhaps surprising that Indian Logic never developed the notion of vyāpyavyāpakatva into the quasi-mathematical, analysis of the relation of terms in extension which constitutes western

SECTION 8. SYLLOGISTIC (CONTD.). THE PURELY POSITIVE AND PURELY NEGATIVE TYPES OF SYLLOGISM

Uddyotakara developed this formal scheme (1) by drawing the important distinction, which Dinnāga failed to draw, between the case in which there is no XP, or X non-P (avidyamāna-sapakṣa, avidyamānavipakṣa) and the case in which the reason is not found in an existent XP, or X non-P (sapakṣāvṛtti, vipakṣāvṛtti): and (2) by taking pakṣadharmatā, the relation of M to S, into account. The former distinction adds seven other possible types to the nine recognised by Dinnāga: three in which there is no X non-P, while the reason is present in all, some, or none, of the existent XP's: three in which there is no XP, while the reason is present in all, some, or none, of the existent X non-P's: and one in which there is neither any XP nor any X non-P. This gives a total of sixteen types.

But the insistence on taking into account the relation of M to S results in the multiplication of this total by three: for this relation also assumes three forms, according as M resides in all, or some, or none, of the Subject (sādhyavyāpaka, sādhyaikadeśavṛtti, sādhyāvṛtti). The total of types of syllogism and paralogism thus reaches forty-eight. But as all types in which M resides only

[&]quot;formal" logic. Indian formalism in fact seems to break off abruptly at the point at which western formulation begins, perhaps by a fortunate instinct.

The Note on the Indian Syllogism in Mind xxxiii p. 398 attempts to appreciate the trairūpya formulation of syllogistic types by way of comparison with western formalism. I do not believe that any really important inference is the thing which it is represented to be either by the Indian attempt to reduce it to an affair of examples, or by the western attempt to treat it as an application of the Dictum de Omni et Nullo. But—if formal logic is admitted to have a certain methodological value—I think that it is as good a mental discipline to turn the wheel of the reasons as to plough the sands of Barbara Celarent. The study of either logic is almost a necessary introduction to the philosophical literature of either civilisation.

Disregarding a variety of ways of sub-dividing the main divisions which give rise to endless types. NV p. 170 l. 17.

partially, or not at all, in S, are asiddha¹, only the first sixteen need be taken into account. The two latter sets of sixteen merely repeat the first sixteen types, with the addition of what we should call a false minor premise. Uddyotakara's contention as against the Buddhists is that they are wrong in holding that only a reason which satisfies all three 'Canons' (a trilakṣanahetu) is valid: because it is necessary to recognise the validity of the purely negative syllogism (kevalavyatirekin), which does not satisfy the second Canon and is therefore dvipadayukta or characterised only by two clauses of the trairupya; and because the examples of the two valid types given in the Wheel of Reasons are as a matter of fact of the purely positive type (kevalānvayin) for the Buddhist, who does not admit that there is anything eternal (anabhyupagatanityatvapakṣa)². It will then be necessary to recognise

The rejection of the sixteen sādhyaikadeśavitti as 'asiddha' does not conflict with the Aristotelian recognition of inference from a minor premise in which S is undistributed to a particular conclusion. For the 'some S' of the conclusion is the Indian logician's sādhya, and if the inference is to be valid the whole of this 'some S' must have been referred to in the premise.

In other words, the M, in a proposition connecting M with some S is still $s\bar{u}dlyaxy\bar{u}paka$, resident in the whole of that (i.e. a particular part of S) with which its connection is asserted, if the proposition is a true one. The subject of particular propositions is in this sense as much 'distributed' as the subject of universal propositions. Indiau logic knows nothing of our distinction of statements as particular and universal—a distinction which, as used in our formal logic, is certainly without logical justification.

Cp. Sugiura pp. 52-53. He points out that the Indian logician does not recognise the particular proposition, and normally states the "E" prop (No S is P) in "A" form (all S is non-P), and therefore presents his thesis in "A" form always. From this he deduces the absence of 'moods' and 'figures' in Indian logic. But I think there are traces of the 2nd and 4th figures,—though not of the 3rd.

The two arguments referred to are Nos. II and VIII—Sound is non-eternal, because a product, and Sound is non-eternal because an effect of volition. There being on the Buddhist view nothing eternal which could be quoted as negative evidence, both these reasons would be classed as purely positive by the Buddhist, if he were consistent. And yet he admits their validity.

not only *two* valid types, but five, viz., two based on both positive and negative evidence (anvayavyatirekin), two based only on positive evidence (anvayināv eva=kevalānvayinau), and one based on negative evidence only (vyatirekin—kevalavyatirekin).

Of the seven types added by Uddyotakara to the nine of the Wheel of Reasons (Nos. X—XVI), the first three are purely positive (avidyamānavipakṣa), the second three are purely negative (avidyamānasapakṣa), and the last is neither positive nor negative—i.e. no evidence at all is adducible (avidyamānasapakṣavipakṣa). They have the characteristics shown in the following tables:—

Table of Nos. 10—12 in Uddyotakara's list of sādhyavyāpaka.

No. Rubric and Example.

Remarks.

10 sādhyatājjatīya-vyāpaka avidyamānavipakṣa. anityaḥ śabda utpattidharmakatvāt.

katvāt.

(Uddyotakara notes that the example is given from the point of view of one who holds that there is nothing eternal. The example No. II of the Hetneakradamarn. Uddyotakara's point in placing it here, as well as at his No. 3=HCD No. II, is to indicate the inconsistency of the Bauddha.)

The kevalānvayin accepted as valid by the subsequent Nyāya school, e.g. the pot is nameable because knowable. (If we took 'everything' as the minor here, the argument would fall under No. 16 below.)

P and M are both infinite in extension while S is of less extension.

Rubric: All S is M.
All XP is M.
There are no X nonP's.

¹NV p. 167 ll. 3—6. ta ete pakṣavyāpakāḥ sodaśa. esām pañca hetavaḥ, ścṣā hetvābhāsāḥ anvayavyatirekiṇau dvau vipakṣāvrttī tṛtīyanavamau; ekāntavādinonvayināv eva daśamaikādaśau; vyatirekī pancadaśa iti.

[&]quot;These are the sixteen types in which M resides in the whole of S. Five of them are valid reasons, the rest fallacies: the valid reasons are:—two positive-negative, in which M is not found in X non-P, namely, the third and ninth in the above list; for the person who maintains that there is only one class of things, viz., non-eternal things, the tenth and eleventh are purely positive; the fifteenth is purely negative".

⁽The positive-negative reasons are described as vipakṣāvṛtti to distinguish them from the fallacious positive-negative reasons, which are either vipakṣaikadeśavṛtti or vipakṣavyāpaka.)

No. Rubric and Example.

11 sādhyavyāpaka tajjātīyaikadesavṛtti avidyamānavipakṣa. anityaḥ sabdo bāhyendriyapratyakṣatvāt.

(This is the same example as that given as No. 9=HCD No. VIII. It is given at No. 9 in a fuller formsāmānyavišesavato 'smadādibāh yakarana pratyaksat -Had the Bauddha been consistent he would put his second example of a valid hetu here, as a second form of kevalānvayin.)

12 sādhyavyāpaka tajjātīyāvṛtti avidyamānavipakṣa. anityaḥ sabdaḥ śrāvaṇatvāt. (again kevalānvayin from the Bauddha point of "view only.)

Remarks.

Another form of kevalānvayin,
—valid if No. 10 is valid (?).

I have not met with an
example from the Naiyāyika
standpoint, but an example
would be 'The pot is nameable because visible '.

P is infinite in extension, but M is of less extension than P. S again is of less extension than M, otherwise the rubric would be that of No. 12.

Rubric : All S is M.

some XP is M.

There are no X non-P's.

A third form of kevalānvayin, only differing from the asadhāraņa fallacy in that the rubric of the latter ripaksävrtti in place avidyamānavipaksa. is to say, it is an asādhāraņa with an infinite major term. P is infinite in extension. while S and M, which coincide in extension, are less than P in extension.

Table of Nos. 13—16 in Uddyotakara's list of sādhyavyāpaka.

No. ' Rubric and Example.

13 sādh yavyāpaka avidyamānasajātīya vipakṣavyāpaka. Nityaḥ śabda atpattidharmakatvāt.

> (This is the example of one of the viruddhahetus given in HCD viz., No. 1V; and by Uddyotakara in his corresponding No. 4. It is given here to indicate again, that from the Bauddha point of view this is its *rubric-since proper their view all things are utpattidharmaka nothing is eternal.)

Remarks.

This is in form kevalavyatirekin, but obviously invalid as residing in the vipaksa.

Rubric : All S is M.

There are no XP's,

All X non-Ps are M. (a single instance X non-P M is of course fatal.)

· Rubric and Example.

11 sādhyavyāpaka avidyamānasajātīya vipakṣaikadeśavṛtti. nityaḥ sabdo bāhyendriyapratyakṣatvāt.

(comment as at 13, mutatis mutandis. The example = HUD No. VI, and Uddyotakara's No. 5.)

Remarks.

Remarks as at 13, Rubric: All S is M, There are no XP's, Some X non-P's are M (though some are not M).

15 sādhyaryāpaka aridyamānasajātīya vipaksāvṛtti. Nedam nirātmakam jīvac charīram anindriyādhiṣṭhā-

natvaprasangāt. This example is of course given from Uddyotakara's

given from Uddyotakara's own standpoint i.e. he accepts it as valid.) This is the arītahetu accepted by Uddyotakara. It, is asā-dhāraņa and at the same time kevalavyatirekin. It is valid because 'vaidharmyan na vyabhicarati'i.e. all three terms coincide in extension. Rubric: All S is M.

There are no XP's, No X non-P is M.

16 paksavyāpakā avidyamāna-The anupasamhārin. See below, sapaksavipaksa.

sarvam nityam prameyatvāt. S, M and P all inflimited in extension.

All S is M, but there are no XP's nor X non-P's.

(a) The Purely Positive types (anvayin, kevalānva yin)

There are several passages' in which Uddyotakara seems to say that two of the three purely positive

Besides the passage at NV p. 167 (cited in the last footnote) see p. 131 l. 18 which deals with a scheme (apparently attributed to Dinnäga) of seven types of reasons—a saptikā. "Saptikāsambhare satprotisedhād ekadvipadaparyudāsena trilakṣaṇo hetur iti tad apy ayuktam, dripadelakṣaṇayor heturvāt drilakṣaṇayuktayor heturvād iti, anabhyṇpaṇatanityapakṣaṇya kṛtukatvād ity ayam drābhyām lakṣaṇābhyām yniyate, prayatṇānantarīṇakatvād iti cānaṇor hetubhāvo na syāt . . "The view which recognises seven types and by rejecting six of them as breaking one or two clauses of the trairāṇya reaches the conception of the reason with three

types are valid arguments. And yet examination of these passages discloses the fact that he never gives an example of these types which he would himself consider as really belonging to them: the arguments given as illustrations being in every case arguments which are really of the 'positive-negative' (anvayavyatirekin) type, but which would be 'purely positive' for the Buddhist, if he were consistent. Moreover, the argument for their validity in every case takes the form of an argumentum ad hominem.

'Either the two arguments which the Buddhist gives as illustrations of valid syllogisms are not valid, or else he must admit that the purely positive type is a valid type of syllogism.' There seems to be no passage in which Uddyotakara definitely commits himself to the view that the kevalānvayin is a valid type: though this subsequently became the accepted view of the Naiyāyika school. Vācaspati Miśra says that an example, from Uddyotakara's own point of view, of the purely positive type would be 'differences are nameable, because they are knowable, like universals'. He argues that absence of negative instances does not deprive a middle term of its cogency: for this cogency does not depend simply on the negative concomitance 'All X non-P is non-M'—if

characters', is wrong: because two middles which have only two characters are true reasons, viz., the middle 'being a product' is endowed with (only) two characters for the person who does not admit the existence of any eternal subject; and so is the middle 'being an effect of volition': and so these two middles would not be valid reasons. ."

The passage at NV p. 59 merely repeats this. Passages at p. 48 and again at p. 51 suggest that the trividham anumānam of NS I. i. 5 may mean anvayin, vyatireķin, and anvayavyatireķin. This looks as if Uddyotakara himself accepts all these three as valid. But again he fails to give an example of the first class which is really kevalānvayin, and again asserts its validity only conditionally—yathā sarvanityatvavādinām anityah sabdah kṛtakatvād ity asya hi vipakṣo nāsti.

¹NVT p. 115 l. 21 (on NV p. 48 l. 12). The example he givet has the merit of not being a mere truism, like the stock example 'the pot 's nameable because knowable'. There is an obvious difficulty about naming a visesa: for a name universalises, expressing unity in difference. Visesa here must mean the category so named.

it did the 'too restricted' (asādhāraṇa) middle would be a valid reason—; it depends on its being endowed with essential relationship to the thing to be proved (svasādhyena saha svābhāvikasambandhaśālitā); and the fact of its being so endowed can be known by a purely positive concomitance provided it be unconditioned (anvayamātreṇāpy upādhirahitena); just as it can be known by the combined positive-negative concomitance. And the negative concomitance can (in this case) be dispensed with. But where negative instances, X non-P's, exist, the negative concomitance has to be taken into account, to set aside the doubt as to M's residence in X non-P's¹.

The question of course remains—How, on a view of inference which makes it essentially an affair of examples, is it possible to be sure that, a concomitance is 'unconditioned', in the absence of negative corroborative evidence? The 'modern' school has expended much ingenuity in the search for a definition of vyāpti, universal concomitance, which shall cover the case of the 'purely positive' inference. Gangeśa in the Tattvacintāmaṇi

^{*}NVT . p. 115 II. 15—20. The passage dealing with the purely positive inference extends from p. 114 I. 22 to p. 115 I. 24. The earlier part of it deals with the suggestion that if we admit that in the absence of negative examples there is no negative concomitance 'all X non-P's are non-M', this amounts to the admission that M does reside in X non-P-because the denial of a denial is the affirmation of the thing first denied. The answer is that it is absurd to suppose the presence of M in a mere 'indesignate' or non-entity (nirupākhya) like non-P which cannot even serve as a locus for the absence of M. When a dying man cannot even drink water sensible people do not suggest that he might take gruel! The principle that denial of denial is affirmation is true only if the original denial is a denial of something. But here there were no X non-P's in which the presence of M could be denied. For it has been truly said that it takes two positive entities to make a negation (sadh) yām abhāvo nirāpyate, naikēna satā), i.e. M and X non-P must both exist before it is possible to deny that M exists in X non-P.

The western scholastic feels the need of this sound principle for the limitation of 'infinite terms' in other connections; as for example when he

reviews a series of such definitions and rejects them all on the ground that they involve, explicitly or implicitly, reference to a *vipakṣa*, X non-P, in which M is absent, and thus exclude the 'purely positive' inference'.

Difficulties also arose in the attempt to draw a distinction between the purely positive inference, which was accepted as valid, and certain inferences which come under the rubric avidyamānasapakṣavipakṣa (No. 16 of the Tables above), i.e. an argument of which the minor term is 'everything' and in which therefore the major must also be found in everything, so that there could be no negative instance². As there can be no positive instance sapaksa, either, since everything is the paksa, it seems clear that such arguments must be regarded as invalid on the view which makes inference an affair of examples. For in such arguments no examples, positive or negative, are forthcoming.—And yet it seems obvious that if we can validly argue that 'the pot is nameable because knowable', we could just as well argue that 'everything is nameable because knowable '.

deals with the process of 'inversion' by which All S is P yields the some-times absurd implication that some non-S is non-P. He would hardly infer that since all that can be known can be named, therefore some things that are unknowable are unnameable. And yet he would probably not hesitate to 'contrapose' this proposition into the form 'No unnameables are knowable'—which is equally objectionable to Vācaspati's principle.

¹See Vidyābhūṣaṇa H1L pp. 421—425.

²See Keith ILA pp. 145-146 and 118—121. He says that the difference between all can be named because it can be known and Uddyotakara's No. 16 'all is eternal (or non-eternal) because it can be known, is that in the former "there is a real ground of connection between naming and knowledge . . . 'and the test of reasoning in the school is always correspondence with reality". This is true: but the question remains how this correspondence with reality is, guaranteed on the basis of 'simple enumeration'—the absence of negative evidence making the 'method of difference' inapplicable.

There were some who were driven by the logic of their own first principles into admitting the validity of the pot is nameable because knowable, while denying the validity of all is nameable because knowable; on the ground that in the former case positive evidence (sapakṣas) at least is available; while in the latter case no evidence at all is available, the unlimited nature of the pakṣa excluding the possibility of quoting examples not included in the pakṣa itself; and to quote the pakṣa itself as an example of course begs the question.—It was in fact impossible to defend the argument all is nameable because knowable, from the point of view of the logic of sapakṣa-vipakṣa; except by the desperate device of allowing one or other of the particulars which constitute the pakṣa to figure also in the capacity of sapakṣa.

(b) The Purely Negative Type (vyatirekin, avīta hetu², kevalavyatirekin)

If there is room for doubt as to Uddyotakara's attitude towards the purely positive inference, he makes up for it by an unequivocal defence of the validity of the

The difficulty is exactly that which Mill found in all syllogisms, as formulated by western logic. It was avoided in the Indian formulation, so far as that argues from sapakṣas to pakṣa, i.e. so far as it is an affair of examples. But the Indian formula goes bankrupt when there are no examples, the only 'evidence' for the conclusion being the pakṣa itself. The truth is that argument from examples—or, what amounts to that, from a generalisation from examples—so far from being the type of all inference, is a comparatively rare and uninfportant way of reasoning; and there is nothing objectionable in finding the evidence for the conclusion in the 'pakṣa' itself. This was recognised in the doctrine of antareyāpti. See Nyāyāvatara, l. 20.

^{*}For vīta and avīta see NV p. 126 l. 8. and Keith ILA p. 90. The two words are usually translated 'direct' and 'indirect': and the latter-rendering corresponds with the fact that Uddyotakara always expresses the negative argument (vyatirekin, which for him always means kevalavyatirekin or avīta) in the indirect form of an argument from the undesirable consequences (prasanga) of the opposite thesis, e.g. na nirātmakam idam jīvac charīram, aprānādimattvaprasangāt, 'the living organism is not without a soul, because if it were it would follow that it should be without vital functions. But the precise meaning of vīta in this connection would seem to

purely negative type¹. (No. 15 of the Tables above.) In an argument of this type, since there are no cases of P (other than S) by definition, and since M does not reside in the cases of non-P (for if it did the argument would be a fallacy as violating the third canon—see Nos. 13 and 14), it follows that the middle term is restricted to the minor. In other words it is asādḥāraṇa.

Thus the property of possessing vital functions is a peculiar property of the living organism. But it is admitted that a peculiar property of the Subject is a fallacious middle term, designated the 'too restricted reason' (asādhāraņahetvābhāsa), in such an argument as sound is eternal because the object of hearing '. Must it not then be considered fallacious also in the (supposedly valid) ' purely negative ' argument ' the living organism possesses a soul because it possesses vital functions '? If not, what differentiates the purely negative type from fallacious uses of a middle term which is restricted to existence in S. the subject of the inference?—Uddyotakara's answer is that the negative reason (vaidharmyahetu) is indeed a 'restricted' quality (asādhāraṇa); but it is a restricted quality the opposite of which (non-M) is found only in non-P's, and not in P's also,—vaidharmyain na vyabhicarati.

The condition of validity, whether of a positive or of a negative argument, is not the mere concomitance of M and P(in the former case) nor of non-M and non-P in the latter case; but, in either case, the avyabhicāritva of the concomitance, i.e. the fact that M is not found with

be that the hetu or middle term 'goes away from' the pakṣa or minor (vivid-hena prakārena itah . . . pakṣavyāpakatve sati, sapakṣavyāptyā 'vyūptyā ca. NVT pp. 192-3). The avīta hetu is consequently a hetu formed by an asādhārana dharma, i.e. by a quality which does not 'go away from' the pakṣa into sapakṣas, but is found in the pakṣa only.

¹NV pp. 126-127.

non-P in the former case, and the fact that non-M (the vaidharmya) is not found with P in the latter case. in the case of the 'too restricted' fallacious reason non-M is found with P as well as with non-P: that is, among things which are not objects of hearing, some are eternal, but some are non-eternal: so that the argument 'sound is eternal (or non-eternal) because the object of hearing 'is invalid. But in the case of the 'purely negative' argument 'the organism has a soul because possessed of vital functions', non-M is only found with X non-P-for the simple reason that there are no XP's, S being the only P; and M is restricted to S. That is, the organism, S, to which vital functions, M, are restricted, is the only thing to which either party would attribute possession of soul. P: therefore the absence of vital functions (non-M) is only found in things which are not possessed of soul (non-P). Therefore this argument satisfies the condition of avyabhicāritva1—vaidharmyain na vyabhicarati—2 and is valid.

^{&#}x27;As Keith says (ILA p. 145) "in the fallacy the major term has greater extension than the other terms, while in the inference which is valid all three terms have the like extension". Vācaspati Miśra's account of the avyabhicāritva of a negative reason is based on the entirely different principle that the negative 'major premise' must have the form All non-P is non-M—according to Praśastapāda's formula. Uddyotakara is content with the major premise All non-M is non-P—see below. His interpretation of avyabhicāritva is that non-M is never P. Vācaspati's is that non-P is never M.

There can be no doubt that the interpretation of this phrase here given is that which Uddyotakara intended. But the actual statement (NV p. 127 II. 16—21) presents a difficulty. "Yadi tarky asädhärano dharmo hetur, nityä prthivī gandhavattvād ity ādayo hetavah prapnuvanti.—Na, hetaarthāparijāānāt. satyam asādhārano raidharmyahetul: na punar vaidharmyam vyabhicarati, gandhavattvam ca nityānityavyabhicāri. Tasmād anvayino vyaṭirekinas ca nānvayavyatirekau, hetubhāve nimittam, kinitv anvayavyatirekayor avyabhicārah."—'It may be objected that if a quality restricted to the subject (S) is a valid reason, then such arguments as 'carth-substance is eternal because possessed of smell' will become valid arguments. But the objection is based on a complete misunderstanding of what constitutes a valid reason. It is true that the valid negative reason is formed by a quality restricted to the subject. But in the case of the valid negative reason the opposite of the quality which forms the reason is not found in P as well as in non-1' (vaidharmyam na vyabhicarati).—Besides, in the case adduced by the objector, the possession of smell is us

It amounts to this. If M is only found in S, no positive evidence that S is P will be available. If there is any positive evidence (XP's) available it will in fact invalidate the conclusion intended to be drawn (because it will ex hypothesi be a case of XP non-M): so that absence of positive evidence is a condition of the validity of the conclusion: in other words the argument must be avidyamānasapakṣa in order to be valid. If that condition is fulfilled, the negative evidence is bound to be uniformly in favour of the conclusion (assuming that there is any negative evidence forthcoming²), since the absence of M will be found ex hypothesi in all cases outside S, so that the concomitance of non-M and non-P will be invariable.

a matter of fact found with non-P as well as with P (in the case of S, earth-substance, itself—for though earth-atoms are eternal, earth-composites are not: so that the argument is bādhita, i.e. P is not found in the whole of the subject).—The fact is that it is not the (mere) positive concomitance and negative concomitance that make a positive and a negative reason respectively valid, but the invariability of the concomitance in either case."

At first sight it looks as if the statement gandharattvam ca mityanityavyabhicāri were meant as an explanation of the phrase vaidhārmyam na vyabhicarati. But this is difficult, for Uddyotakara is precluded by his own principles from saying that the argument is savyabhicāra in the sense that M, possession of smell, is found with other non-eternal things: because M is an asādhāraṇadharma, i.e. only found in S (earth-substance being alone odorous in Indian physics), so that a counter-instance XM non-P-a vipakṣa in which M is present—is not forthcoming. All that can be done is to adduce a counter-instance of the form X non-M P-a sapakṣa in which M is absent. Therefore, if the clause were intended to explain vaidharmyani na vyabhicarati it should have run gandhābhāvo nityānityavyabhicārī.

Taking the text as it stands, the clause must be regarded as a parenthesis- Apart from other objections this particular argument would

anyhow be invalid, since it is bādihta."

'S itself cannot be adduced as evidence of connection between M and P without begging the question—for we do not yet know that S is P. And if there are other cases in which P is found—XP's or sapaksas—they will not be evidence for connection between M and P, because ex hypothesi M will be absent in such cases.

If none is forthcoming the rubric will be avidyamānavipakṣa, and the argument will be invalid. There are four possibilities in the case of an asādhāranadharma which is used as a middle term (ignoring cases where M is not sādhyavyāpaka, i.e. where S is as a matter of fact not M, i.e. where the argument is condemned ab initio as 'asiddha'). They are:—

(a) S and M coinciding with each other in extension also coincide with a limited P. The rubric then is avidyamānasapakṣē

The valid purely negative argument, as formulated by Uddyotakara, involves an illicit process of the major term.

"Yāvad aprāṇādimat tat sarvam nirātmakam dṛṣṭam iti. aprāṇādimattvam ca jīvaccharīrān nivartate. tasmād tad-avyabhicāri nirātmakatvam api nivartsyati".

vipakṣāvṛtti. This is the valid use of an asādhāraṇadharma an a hetu=No. 15, the kevalavyatirekin.

- (b) S and M coincide with each other in extension, but not with P, which is unlimited in extension. Rubric, sapakṣāvṛtti avidyamānavipakṣā. An example would be 'sound is an object of knowledge because an object of hearing', which is a good enough syllogism, though it stands condemned on the 'evidence' view of inference, since no negative evidence is available and the positive evidence goes against the conclusion. This is No. 12 above. It is really quite as good an argument as Nos. 10 and 11, which are commonly accepted as valid 'purely positive' arguments.
- (c) S and M coincide with each other in extension, but not with P, which is limited in extension. Rubric, sapakṣāvrtti vipakṣāvrtti (No. 6 in Uddyotakara's list No. 5 in the Wheel of Reasont). This is the normal type of the fallacy of 'too restricted reason', asādhāvaņa hetvābhāsa, e.g. 'sound is eternal (or non-eternal) because the object of hearing'.
- (d) S and M coincide with each other in extension, and with P, but all three are unlimited in extension. Rubric, avidyamānasapakṣa avidyamānavipakṣa. There being no evidence at all the argument stands self-condemned, on the Indian theory of inference. No. 16 in the above table, the anupasamhārin of later logic. But 'all is nameable because knowable'—which would fall under No. 16-is as good an argument as 'the pot is nameable because knowable', the kevalānvayin type No. 10. In rejecting No. 16 Uddyotakara lays down the principle on which he rejects it : but unfortunately the reading is doubtful. If his principle is that a property unlimited in extension cannot be a valid middle term, this principle would exclude No. 10 (one of the supposedly valid kevalānvayin types), as well as No. 16: and the question whether Uddyotakara accepts the kevalānvayin could be answered in [It is true that the othe? 'purely positive' type the negative. No. 11 (a limited middle with an unlimited major) would not be excluded by this principle: but Uddyotakara always speaks of the supposedly valid purely positive types as a pair, and there is nothing which would suggest that he would accept one and reject the other.]

(The passage of the Nyāyavārtika here referred to is dealt with in the note on the Anupasayhlārin, below, p. 248 seq.)

All that is without vital functions is without soul:
The living organism is not without vital functions:

Therefore the living organism is not without soul.

Vācaspati Miśra' in commenting on this passage says that the 'major premise' must be 'converted' (vyatyāsena yojanā) into the form yāvan nirātmakam tat sarvam aprānādimad dṛṣṭam—

All that is without soul is without vital functions.

Nor is there any formal objection to this conversion, from the point of view of those for whom life and soul are of equal extension. But it openly begs the question: for the opponent's position is that some things without a soul (viz., the living organism itself) do possess vital functions. Uddyotakara's formulation appears to avoid the petitio, since an opponent who maintains all things to be soul-less would have a formal difficulty in refusing to accept the proposition that all *manimate* things are soul-less. But in thus avoiding an open begging of the question he merely transforms what is the same difficulty into the form of an illicit major. He is quite aware of the difficulty.2 and attempts to meet it by an argumentum ad hominem. The critic of the argument can only substantiate his chargé of illicit major by adducing, as an example of a thing which is not devoid of vital functions and devoid of soul, the subject (paksa, S)—the living organism itself: for, from the very nature of the argument, there is no other case of a thing possessed of vital functions (not devoid of vital functions) which can be instanced³.

^{&#}x27;NVT p. 192 l. 11.

²Which he states in the form "only the absence of vital functions is excluded from the organism—not the absence of soul".

See Note on the Indian Syllogism in Mind, n.s. Vol. XXXI No. 123, p. 409 footnote, for further remarks on this argument.

The opponent ought to produce a counter-instance in the form X M non-P, i.e. a thing other than the organism (S) which is possessed of vital

And if an opponent is to be permitted to adduce the Subject (pakṣa, S) itself as an enstasis or counter-example, then no syllogism, not even the most cogent, will be safe from enstasis: and, even in the case of an argument such as 'sound is non-eternal because a product' (which both parties accept as a valid 'positive-negative' type) it will be possible to object that in the case of sound, the pakṣa itself, M is accompanied by non-P—i.e. that sound is a product and yet not non-eternal'.

Uddyotakara's defence of the argument amounts to this.—There is no positive evidence. The opponent cannot therefore point to cases in which vital functions are found in the absence of a soul. Nor can the defendant, on the other hand, point to cases in which vital functions are found together with a soul². The case must be argued on the basis of the negative evidence. And here the defendant has it all his own way, from the very nature of the case: for all cases X non-P are necessarily non-M: so that no exception can be forthcoming to the concomitance of non-M and non-P—' vaidharmyam na vyabhicarati'.

The defence is ingenious; and it is not altogether misplaced ingenuity. For it is true that the nerve of the argument is the *difference* between the subject and all other things. But of course mere negation can prove

functions (M), but is not possessed of soul (non-F). But it is impossible to do so.—This would be a counter-instance to Vācaspati's major premise, all that is without soul is without vital functions. So that Uddyotakara does in reality meet the charge of illicit major by saying that the opponent cannot (without begging the question) object to the converted major premise. Why then does he not himself use the converted major, as Vācaspati does? Because he is well aware that, as the opponent cannot produce a case of X M non-P, so he himself again cannot produce a case of X M P. No evidence' is available, for either party, without petitio, in the sphere of what possesses M.

^{&#}x27;NV p. 127 l. 1 pakṣavyabhicāropadarśane sati śakyam vaktum 'anvayini tu hetau śabde nityatvam asty sati kṛtakatva' iti. •

²See footnote 3, p. 246.

nothing¹: and the weakness of Uddyotakara's position—a weakness inherent in the view that inference is an affair of 'evidence', arguing from particular to particular—is that he feels himself precluded from admitting the subject, S, itself as evidence. But 'Difference' requires two sorts of evidence—positive as well as negative: and to insist that the argument is 'purely negative' is to exclude the positive factor.

(c) The Anupasamhārin³

This is a syllogism in which, all the three terms being of unlimited extension, there are no examples available, and the middle term is of course restricted to the minor (asādhāraṇa). Uddyotakara himself treats it as a case of the use of an asādhāraṇadharma as a middle term.

'Keith ILA pp. 120-121. "To arrive at a positive conclusion from a negative is in itself an unusual procedure." This is true when the negative does not function as 'the cutting edge of a positive'. Keith thinks the 'purely positive' is less objectionable than the 'purely negative' type: but a knife without an edge is quite as bad as an edge without a knife. Indeed the inadequacy of the paradeigmatic formulation of inference comes out more clearly in the case of the 'purely positive' than in the case of the 'purely negative' type.

There is an obvious analogy between the Indian distinction of middle terms or syllogisms as 'positive' and 'negative', and the 'agreement' and 'difference' of modern Inductive logic. For the Indian distinction turns on the nature of the evidence available, i.e. it belongs to the Indian syllogism in its 'inductive' aspect. But any attempt to press the analogy further might be misleading. The Indian syllogism is a syllogism of superficial observation applied by thinkers whose interests were predominantly metaphysical to subjects which for the most part do not fall within the province of superficial observation. Very much the same thing may be said of the western syllogism of course. But the "inductive methods" attempt at least to formulate the exacter observations of experimental science: although the attempt may be (as Bosanouet maintains it to be) on altogether wrong lines, being still confined within the 'linear' view of inference. See his Implication and Linear Inference pp. 31-32.

**Upasamhāra is a synonym of upanaya (see NS I. i. 38), and means

*Upasamhāra is a synonym of upanaya (see NŠ I. i. 38), and means the application of the example to the case under consideration. In the anupasamhārin type there can be no application because there are no examples. Keith (ILA p. 145) renders 'the reason which does not subsume'. The name anupasamhārin appears to be late; but the type is avidyamānasapakṣavipakṣa, i.e. No. 16 of Uddyotakara's list. There are no negative examples because the major term is unlimited in extension, and no positive examples because the minor term is unlimited in extension.—The type may be indifferently regarded as a fourth variety either of the avidyamānasapakṣa types (Nos. 10—12), or of the avidyamānavipakṣa types (Nos. 13—15), or

of the asādhārana types (see footnote 2 on page 244, supra).

As such it has to be differentiated from the valid ' purely negative 'type. 'Yaḥ punar asādhāraṇo dharmaḥ pakṣa eva kevalam, yasya tattulyavipakṣau na staḥ, sa kasmān na hetuḥ? Yathā sarvam nityam sattvāt."'— "Why should not a middle term which is a peculiar property residing in the Subject (S) only, and with respect to which neither positive nor negative examples exist, be regarded as a valid reason? e.g. everything is eternal, because existent." The principle which was used to differentiate the valid 'purely negative' type, No. 15, from the fallacy of the 'too restricted middle' (asādhāranahetvābhāsa)—the principle that non-M is never found in XP's but always in X non-P's—is not applicable. because there are no cases of non-M, nor of XP, nor again of X non-P. Another principle is required, and Uddvotakara states it. The text runs:—satyam asādhārano na vyāvrttah avyāvrtte hetuh. As it stands this does not seem to give any sense. The editorial note expresses an opinion that avyāvrtto hetuh is the true reading: but this again does not seem good sense. Jhā's translation implies a reading: satyam, asādhāranah. na vyāvrttah. avuāvrtto na hetuh. "True: the property of existence is a unique one; but it is one that is not excluded from anything; and by reason of this non-exclusion it cannot be a true negative *Probans*." This is good sense, though the principle enunciated—that an unlimited middle is never valid—would also condemn type No. 10, one of the supposedly valid 'purely positive' types ('the pot is nameable because knowable'). It is possible that Uddyotakara wrote avyāvrtto 'vyāvrtte na hetuḥ—and meant by this, "an unlimited middle in an unlimited minor is not a valid reason". This would exactly describe the anupasamhārin.

• The examples which Uddyotakara gives—all is eternal because existent, or because knowable,—are both

¹NV p. 127 ad fin.

false, because as a matter of fact the major of the argument (eternality) is not unlimited in extension (although the person who proposes the argument must be presumed to hold that everything is eternal—otherwise there could be no excuse for putting the argument under the rubric avidyamānavipakṣa). What would be have said of an argument which does really conform to the rubric, and of which the conclusion therefore cannot but be true,—such as the stock case 'everything is nameable because knowable'? He must have condemned it if he adhered to the view of inference as argument from like and unlike cases: for it is a necessary corollary of this view that about everything you can prove nothing.

Note A.

The introduction of avadhāraṇas into the trairūpya. Uddyotakara's criticism (NV pp. 58-59).

In his criticism of the three canons of the syllogism (trairūpya), as formulated by Dinnaga in the line Anumcye 'tha tattulye sadbhāvo nāstita' sati, Uddyotakara points out that, on the one hand, it is necessary to read into them restrictive forces (such as are expressed by 'eva' in various positions): and that, on the other hand, such restrictions cannot be read-into the formula without making the whole self-contradictory, and some of the parts superfluous.

The formula says that a valid middle term—

i. resides in the anumeya (sādhya),

ii. resides in what resembles the anumeya (i.e. in sapakṣas or positive examples),

iii. does not reside in what is not like the 'anumeya (i.e. in vipakṣas or negative examples). That is to say: SP is M; XP is M; X non-P is not M.

Uddyotakara says that the first clause will fail to exclude such arguments as 'atoms are transitory because

they are edorous;—like a pot ': i.e. arguments which are invalid because the middle is sādhyaikadeśavṛtti, i.e. resides in part only of the Subject, viz., atoms (since earth-atoms only are odorous, and no other kind of atoms)¹.

In order to exclude such arguments it is necessary to find somewhere in the trairūpya the requirement that the middle term should be sādhyavyāpaka, and not merely sādhyaikadēśavṛtti. That is, it is necessary to find the requirement that all SP should be M (which constitutes pakṣadharmatā).

The Bauddha now maintains that this requirement can be read into the first clause of the formula—anumeye sadbhāvaḥ—in virtue of a restrictive force (avadhāraṇa) which is implied in the statement. Uddyotakara asks: what restriction is intended? Two different restrictions are, in the first instance, possible—

- (a) anumeye sadbhāva eva, existence in the subject;
- and (b) anumeya eva sadbhāvah, existence in the subject.

[&]quot;That is, there is failure of pakṣadharmatā in this argument—as western schoolmen would say, there would be an illicit process of the minor, since the anumeya (that about which we are going to draw the inference of 'being transitory') is all atoms, not one class of atoms only.

Of course there will also be a failure of vyāpti in the argument, i.e. the major premise cannot truly be stated as a universal proposition: since only some, and not all, odorous things are transitory (earth-composites are transitory, but earth-atoms are eternal).

But it is very noteworthy that Uddyotakara is this criticism of the trairūpya hardly raises the question whether it includes a statement of vyāpti in the sense 'all M is P'. He uses the word vyāpti, but in the sense 'all SP is M—i.e. in the sense of paksadharmatā. He writes as if almost unconscious that vyāpti in the later sense of 'all M is P' (Prasasta-'pāda's vidhi or formula for the nidarsana or 'major premise') formed any part of Dinnāga's logical theory. From this silence it might be inferred either (a) that Uddyotakara did not think that it was the business of the trairūpya to formulate the requirement of a vyāpti, and was aware that Dinnāga did not intend his formula to do this; or else it might be inferred;

But the latter is ambiguous. Does it stand for

(i) bhavaty evānumeye sadbhāvah,
or does it stand for

(ii) anumeya eva bhavati sadbhāvaḥ?

In the form (i) you are asserting emphatically, as against the suggestion that M and SP do not co-exist, that 'there is existence of M in SP' (asambhavo nivartyate, non-co-existence is set aside): but you do not indicate whether all SP is M or only some SP is M. So that a restriction in this form will be of no use. In the form (ii) you are asserting that the concomitance with M is found in the anumeya, but nowhere else. In that case you are contradicting your second canon, which tells us that the middle term must be found elsewhere than in the anumeya or SP,—to wit, in the sapakṣa or XP. And the restriction does not give the required force in any case: for it says that 'only SP is M'; and this does not imply (what we require) that 'all SP is M'.

As to the first main alternative, (a) above, i.e. taking the 'eva' after the second word (uttaram avadhāraṇam, i.e. anumeye sadbhāva eva,—contrasted with pūrvam avadhāraṇam, i.e. eva taken with the first word in the sentence, anumeya eva sadbhāvaḥ): the Bauddha says that this gives the meaning of a vyāpti (tasya vyāptir arthaḥ). 'Even so,' it is the anumeya, SP, that is 'distributed' by the universality of predication here (avadhāritain vyāptyā)—not the property, viz.,

⁽b) that he refrained from raising the question whether the requirement of $vy\bar{a}pti$ was or ought to be formulated in the $trair\bar{u}pya$ because he does not wish here to anticipate the discussion of $vy\bar{a}pti$, which forms the climax of his criticism of Buddhist logic.

Uddyotakare himself rejects the notion of vyāpti universal connection between qualities in the abstract, as unintelligible. See below Chapter IV, section 5.

^{&#}x27;Uddyotakara begins with a tathāpi—'even so'—which implies further criticism. But his criticism starts with the admission that the first clause thus understood; meets the difficulty first raised: for it does formulate the requirement that all SP must be M—the requirement of pakṣadharmatā. But then it makes the second clause superfluous.

connection (dharma): for the principle is that the restriction applies to something other than that to which the particle eva is attached (yata evakaranam, tato 'nyatrā vadhāranam iti). That is, when the eva, 'only', is attached to the predicate (sadbhāva, in the statement anumeye sadbhāva eva), it is the subject of the proposition (anumeya, here) that is delimited (avadhārita, i.e. 'distributed'. Cf. the formula of our schools logic: only P is $S = all S is P)^1$.

By the addition of the restrictive particle to concomitance-with-M, the anumcya (SP) is restricted (to concomitance-with-M, i.e. is 'distributed'—niyata); but 'concomitance' is left undistributed (prasta), owing to there being two possibilities, viz., equipollence and greater extension (ryāptyativyāptibhyām, i.e. it may be that all cases-of-concomitance-with-M are cases-of-SP; but it may also be that only some cases-of-concomitance-with-M are cases-of-SP)².

But if M extends beyond SP, there will be two sets of cases left over to which it might extend,—cases of P other than SP; and cases of non-P. It may be admitted that the Buddhist formula rightly excludes the extension of M to non-P in its third clause, nāstitā 'sati. But then the second clause tattulye sadbhāvah becomes pointless, seeing that all that the second clause desires to assert is

^{&#}x27;Vācaspati gives the case of 'the lotus is blue'. This admits of three aradhāranas, expressible in English by accentuating: (i) the subject: 'The lotus is blue', i.e. nothing else is blue: (ii) the predicate: the lotus is blue, i.e. not any other colour: (iii) the copula: the lotus is blue, i.e. it is not true that the lotus is never blue.

[&]quot;The expression is clumsy because sadbhāva or sambhava (existence of M in SP, concomitance of M with SP) has been made the predicate-visesana or dharma, as Uddyotakara and Vācaspati here respectively call it—of the proposition. It is the 'is' that has the 'only's attached to it, in the present reading of the proposition 'SP is M'—'SP is-only (never fails to be) M'. This amounts to saying that SP must be M = all SP is M. Uddyotakara's point is that it does not give us any universal proposition about M (As the western schoolman would say, it does not tell us that all M is SP).

simple concomitance (i.e. not universal concomitance) of M with cases of P other than SP: and this has already been provided for by the fact that you have interpreted the first clause in such a way as not to exclude an *ativyā*-pti, or extension of M beyond SP to other cases of P.

The Bauddha replies that the second clause is stated for the sake of a restrictive force, again, which is to be read into it. Uddyotakara asks again—what restriction is meant? Are we to understand the second clause to mean—

- (a) tattulya cva sadbhāvaḥ?
- or (b) tattulye sadbhāva eva?

The former interpretation is impossible, because it 'distributes' the predicate, $sadbh\bar{a}va$, so that the proposition would mean that M's existence is restricted to XP's: with the result that this latter clause would sublate the former, which asserted that M is found in SP¹. It is not possible to say 'feed only Devadatta, and $Yaj\bar{n}a\bar{n}atta$ '; and so, here also, the sentence 'the middle term exists only in XP's, and in SP', would be the language of a lunatic $(unmattav\bar{a}kya)^2$. If you adopt the other alternative and interpret the clause to mean tattulye $sadbh\bar{a}va$ eva—the middle term must exist in sinilar cases, XP's,—then you exclude, as invalid, middle terms which reside in some but not in all similar cases

Purvottarapade bādhite bhavataḥ. I have followed Dr. Jhā's interpretation here. Vācaspati Miśra however explains the phrase to mean that the first and the third clauses of the trairūpya are sublated by this interpretation of the second clause,—the first, because it is contradicted by the second; and the third, because it only says over again what the second is thus made to say (paunaruktycna).

²Dharmakīrti however defended just this position, under the name of samuccīyamānāvadhārana or 'aggregative restriction', as is stated by Vācaspati Miśra. See Note B for Vācaspati's criticism of this doctrine. There is no indication that Uddyotakara was acquainted with the view, as held by Dharmakīrti. He is merely giving an example of what he regards as abvious self-contradiction. (See also below, p. 258 n. 1, p. 259 n. 2.)

(sapakṣaikædeśavṛtti, i.e. the normal valid 'Barbara' in which P is greater in extension than M—to use the language of the western schoolman). In that case your middle term which resides in part only of the things similar to the Subject, such as the middle term prayatnanāntarīyakatva', would not² be a valid middle term.

What the *Bauddha* wishes to say is that M *must* be found in *some* (not necessarily in all) XP's. Uddyotakara's point here merely is that his formula does not succeed in saying this,—not even with the help of 'avadhāraṇas'.

Elsewhere Uddyotakara raises his real objection, which is that a valid argument need not satisfy this condition. For a 'purely negative' argument is valid, i.e. an argument in which there are no sapakṣas.

Uddyotakara now proceeds to the criticism of the third clause of the definition.

"The clause nāstitā 'sati has been formulated without reflection. To say that the hetu is not found in what is not (asati) is absurd on the face of it: for that which has non-existence as its character is nothing; and nothing

The usual form of this middle term is prayatnānantarīyakatvād (which of course makes no difference). The argument is sabdo 'nityah, prayatnānantarīyakatvād—'sound is transitory, because an effect of volition', and is one of the two valid types of syllogism given by Dinnāga in his list of nine valid and invalid types of syllogism in the Pramānasamuccaya; which gives the nine reasons exactly as given in the Hetucakradamaru. See Fragments from Dinnāga.

²Yas tajjatīyasyaikadešavṛttiḥ prayatnanāntarīyakatvādis tena sa hetur iti prāptam. Jhā suggests the true reading . • . te, na sa hetur . . ; which is confirmed by the Benares 1920 edition of NVT, ad loc.

This text (p. 192 l. 9) gives what is clearly the right reading:

etad eva sphorayati YA iti. te, tava darsane.

This makes it plain that the true reading of the NV must be that implied in Dr. Jhā's rendering, viz., te, na sa hetur iti prāptam (instead of tena sa hetur, etc., in which the Chaukhamba and the Vizianagram editions agree, wrongly). The older texts of NVT reads etad eva sphorayati ITI TE, on which the editor notes idam mudritavārtikapustake nāsti.

cannot serve as a ground or support (ādhāru) of which something can be denied ".

The Bauddha makes the usual reply—this clause too has the purpose of avadhāraṇa, restriction. Uddyotakara asks: what is restricted? Do you mean (1) nāstitaivā 'sati? or (2) asaty eva nāstitā? If the former, the clause is superfluous, for it would be understood without mention. Suppose then that the latter, asaty eva nāstitā is the meaning. Then an argument like 'tais is a cow, because it has horns' can claim the title of valid reason. For the non-existence (nāstitā) of horns is certainly restricted to what is other-than-cow, and so the condition asaty eva nāsti is satisfied: though the condition nāsty eva would not be satisfied.

asaty eva nāsti means that M is absent only in non-P, horns are absent only in non-cows. That is, All creatures without horns are other than cows, or, only creatures other than cows are hornless. This condition is satisfied.

asati nāsty eva means that M is only absent—never present—in what is other than P. X non-P's are only non-M, or, all non-P's are non-M. This condition is of course not satisfied by the argument, for we cannot say that All non-cows are hornless, or that only hornless creatures are non-cows. This is of course the essential condition, as expressed in the later formula asattvam eva vipakṣa, i.e. the hetu must be absent in all the vipakṣas. And Uddyotakara's only objection to this formula is that it has already been stated in tattulya eva sadbhāvah².

¹It 'would be understood' from the previous clause, tattulya eva sadbhāvah.

The previous clause having been interpreted to mean that 'all existence of M is in XP', it is superfluous to add that 'M never exists in X non-P'. See also next note.

²Vācaspati says: (NVT p. 130 l. 5): prathamam kalpam dūsayati YADI TĀVAD iti. Tattulya eva sadbhāva ity anena gamyata ity arthah.

Note B.

Dharmakīrti's doctrine of the samūccīyamānāvadhāraṇa as criticised by Vācaspati Miśra (NVT p.129).

The difficulty is that the Bauddha has so interpreted the first two clauses of the trairupya, by reading 'avadhārana's' into them, as to make the first canon state that the middle term must reside in the subject of inference (anumeya), while the second canon states that it must reside in things which resemble the subject only. But if it is to reside only in things like the subject, then it seems to be excluded from residence in the subject itself: so that the second canon seems to contradict the first. For, as Uddyotakara puts it, only a lunatic would say 'feed Devadatta only,—and feed Yajñadatta'. Vācaspati interprets this remark in the sense which it clearly bears, i.e. as an illustration of the contradiction of the first clause by the following clause (pūrvapadenu saha virodhe nidaršanam āha NA H1 BHAVATÍTI-NVT p. 128 l. 22). He then goes not to state the doctrine that contradiction in such cases can be avoided by understanding the restriction to be aggregative (i.e. if the 'only' applies to the aggregate Devadattaand-Yainadatta, there is no difficulty). "The opponent suggests that in saying that the middle ·term must reside in the subject SP, and in the sapaksa, XP, only, an 'aggregative restriction' is intended, i.e. the 'only' restricts the middle term from residence in vipakṣa's X non-P's, but not from the subject, SP. (samuccīyamānāvadhāraņam vipaksamātrād vrttim ryavacchinatti, na tv anumeyāt). An illustration is to be

Dr. Jhā has overlooked this interpretation of Vācaspati's, and takes the passage as meaning that the word asati is superfluous in the phrase nāstitaivā sati. But Vācaspati's interpretation is clearly correct.

¹This accurately represents the Buddhist formulation of the trairūpya with the help of eva, as given by Dharihakīrti in the Nyāyabindu: anumeye sattvam eva, sapakṣa eva sattvam, asapakṣe cāsattvam eva (NB p. 104 l. 3).

found in the sentence: 'In the beginning he generated from himself two sons,—Nara and Nārāyaṇa only (Narajā ca Nārāyanam eva ca)'. It is with a view to this suggestion that the Vārtika says 'and so here also, the statement that the middle term exists in things like the subject only. and in the subject, would be the language of a lunatic¹. For, if it were a case of aggregative restriction, the word 'only' would be attached to the corresponding word in both clauses, i.e. it would be attached to the word anumeue in the first clause (anumeya eva sadbhārah, M must be found in SP only) just as it is attached to the word tattulye in the second clause (tattulya eva sadbhāvah, M must be found in XP only), in the sense of excluding M from connection with anything else. (In that case we could have an aggregative restriction, or restriction applying to the aggregate SP-and-XP-'M must reside in SP-and-XP only'.)

—But if we thus read the first clause as meaning that 'M resides only in SP' we should (as pointed out before) be admitting, as valid, a middle term which resides in a part only of SP (anumeyaikadeśavrttir api hetuḥ syāt)². And (in the sentence quoted as a parallel. 'he generated two sons, Nara and Nārāyaṇa only') it is certainly not the case that the particle eva ('only') is attached

The sentence translated in Note A above, p. 254. But, as noted there, there is no indication that Uddyotakara is referring to a view such as Dharmakīrti's,—although Vācaspati seems to suggest that he was.—In fact Uddyotakara speaks as if the possibility of a defence of 'aggregative restriction' had not even occurred to his mind: and the passage is therefore perhaps an indication of his chronological priority to Dharmakīrti [Keith I.L.A. p. 28 states that a work Vādaridhi to which Uddyotakara refers—cf. NV pp. 121, 159—'can with certainty be identified with the Vādanyāya of Dharmakīrti.' But this identification, for which Vidyābhūṣaṇa is responsible, is very doubtful: and that Vidyābhūṣaṇa himself became doubtful about it later is indicated by a note to p. 124 of his HIL—'it is reported that Vasubandhu too wrote a work named Vādavidhi which is no longer extant''. Vācaspati Miśra's comment en the NV passages which refer to Vādavidhi leaves the impression that 'Subandhu'. i.e. Vasubandhu' is the opponent against whom Uddyotakara is arguing. This is Gangānātha Jhā's view—See his Transl. vol. I. pp. 441 and 454, footnotes. See Dinnāga_Fragments pp. 26-27 and Turci in S'. R. A. S., Ju'y, 1929, pp. 451—488.

"See Note A above, p. 252.

to the word Nārāyana in the sense of precluding union (of the character of being generated by the being in question) with anything else (anyayogavyavacchedena), while it is attached to the word Nara in the sense of precluding from Nara non-union (of the character of being generated by this being—ayogavyavachedena).

—Very well then (replies the Bauddha), it can be maintained by a person who wishes to avoid applying the restrictive particle in different senses in the two clauses, that the particle eva is used in the second clause also in the sense of precluding non-union with M in the case of the sapakṣa, just as it is used in the first clause in the sense of precluding non-union with M in the case of the anumeya.—This is the doubt which the Vārtika raises in the words 'If you adopt the other alternative and interpret the first clause to mean tattulye sadbhāva eva, etc.': and it disposes of the doubt in the words 'then you exclude as invalid middle terms which reside in some but not in all similar cases²''.

After some further discussion³, the argument continues as follows. The Bauddha urges that "It

That is, the sentence certainly does not mean 'he did generate Nara; and he generated only Narayana with Nara'. In the same way, in the trairūpya, you cannot combine your samucciyamānāvadhāraṇa (in the sense of excluding concomitance-with-M from everything other than SP and-NP: anyayogavyaracchedena) with a separate and different function of cva in the first clause (that of excluding non-concomitance-with-M from SP,—ayogavyavacchedena). That is, the application of the doctrine of samucciyamānavadhāraṇa will not enable you to get out of your formula the meanings which you require, viz., (i) SP cannot but be M—All SP is M, and (ii) only SP-and-XP are M.

²For these words of the Vārtika see Note B, above, p. 254.—It is clear that Vācaspati is here reading into Uddyotakara a reference to the samuecīyamānāvadhāraņa doctrine. I do not think there is any indication that Uddyotakara had Dharmakīrti's arguments in view. See note 1 p. 258.

^{• &}quot;Omitted here because, turning as it does on technicalities of Mīmā-msaka" exegetics, I am uncertain as to its exact meaning. The Bauddh; appears to argue that the main statement (vidhi) is that "the middle term esides only in the sapaksa"; and that the first clause "the middle term always resides in the pakṣa" is to be read as an explanation (anuvāda) ef

cannot be said that the two sentences cannot unite into a single sentence on the ground of a contradiction between them. No such contradiction can be shown to exist, seeing that the exclusion from other things of connection with the middle term (anyayogavyavacchedasya) which is asserted in the statement that the middle term resides only in things like the Subject (tattulya eveti) can also be understood as having reference only to things unlike the subject (and not to the subject itself. vipakṣamātraviṣayatvenāpy upapattau). Therefore the alleged mutual contradiction of the clauses is to be stated as turning on the fact that their meaning (like the meaning of all words, on the Bauddha's 'apoha' theory) is the exclusion of what is different¹.

this. Thus there is no difficulty in making a unity of the two clauses.—The Naiyāyika replies that there will be a break in the sentence-unity (vākyabheda); because a genuine aruvāda must not add anything to the main statement,—anūdyamānam na višestum šakyate.

'tasmād anyāpohārthatvena padānām virodho vaktavyah.—The word padānām may be constructed either with the preceding word (in which case the sense is 'the meaning of words consists in exclusion of what is other'); or with the following word (in which case the sense is 'the mutual contradiction of the clauses . .'). I have indicated the ambiguity by the clause in brackets in the translation.

Stcherbatsky (in le Muséon n.s. vol. v, 1904) has connected the formulation of the trairūpya by means of avadhūranas with the apohavāda. The connection is explicitly stated in this passage, which therefore confirms Stcherbatsky's view. But his inference that the use of the avadhūranas originated with the Buddhists, as a natural corollary of the apohavāda, and is therefore borrowed from them by Prašastapāda carries no weight: for the use of avadhūranas was inevitable, apart from the apoha theory.

Nor is it quite clear from this passage that it is the Bauddha himself who suggests that the clauses of the trairūpya are to be read in the light of the apoha theory. The present sentence may be read as coming from the mouth of the Bauddha—'therefore if you are going to show that the clauses are mutually contradictory, you will have to find another proof: and your proof must bear in mind our view that 'meaning' is nothing but saying what a thing is not'. But it can as well be read as from Vācaspati himself: 'therefore (seeing that you have put up a defence against Uddyotakara's line of criticism) we shall use your own theory of apoha to prove that on your own principles the clauses of the trairūpya are mutually contradictory'. This latter reading better suits the connecting phrase which follows, Tathā hi. For tathā hi always clinches a statement just made,—either by an example or by an explanation of meaning. The difficulty of connecting the two sentences otherwise is indicated by the sentence which have inserted in brackets in the translation.

(Well, mutual contradiction can be established from this point of view.) Thus: in the clause 'The middle exists in the Subject' (anumeye sadbhāvaḥ), the meaning (of the words and of the clause—padārtha)¹ will be: 'The middle exists, i.e. does not fail to exist, in the subject, and it exists in the subject, i.e. not in what is not the subject' (anumeya eva, nānanumeye, sadbhāva eva, nāsadbhāvaḥ)². And thus the absence of the middle from the saṇakṣa, as well as from the vipakṣa, has been stated! In the same way also in the clause 'The middle exists in things like the subject' (tattulyasadbhāva) the meaning of the words (or clause—padārtha) will be 'The middle exists, i.e. does not fail to exist, and exists in the sapakṣa, i.e. not in what is not the sapakṣa'. And thus its non-existence in the Subject is declared!

And if you say "we do not assert (na ca . . . iti cet) possibility of an aggregation (samuccayasambhava) of the meanings of the terms (padārthayoḥ) 'subject' and 'thing like the subject', as mutually exclusive meanings (parasparaparīhāravatoḥ): but we assert actual aggregation together (parasparasamuccayasadbhāva), on the ground that both terms alike signify exclusion of simply what is different from the subject (vipakṣamātravyāvṛtti-paratvāt)":—then our reply will be that this is

¹again the ambiguity in pada, noted above. The equivocal use of the word here seems deliberate, as intended to mark the connection between the discussion of the meaning of the clauses—pada—of the trairūpya, and the Bauddha theory that the meaning of words—pada—lies in apoha.

²This is the meaning in the light of the apola theory. According to that theory S is P should mean 'not-non-S is-not-not not-non-P'. But Vācaspati does not concern himself with the permutation of S.

^{**}ana cānumeyatatulyapa-lārthayoh parasparaparīhāravatoh samuccaya-sambhavah, dvayor api vipakṣamātravyāvṛttiparatvāt parasparasamuccayasad-bhāva iti cet . . I think it is possible to understand this only by taking iti cet as referring back to the whole sentence from na ca.—The sense is that the Buddhist restates his doctrine of samuccīyamānāvadhārana in the light of the apohavāda. "We do not mean that SP and XP are two different things which form an aggregate by addition. There is no need of adding them: for both really mean the same thing. SP means what is not vipakṣa: and XP means what is not vipakṣa:

impossible (na); because in that case 'what is not a tree' and 'what is not a cow' would refer to one and the same substrate (i.e. would be identical, sāmānādhikaranya), since the meanings of the terms 'tree' and 'cow') will be indistinguishable in so far as both alike signify exclusion of elephants and so forth².

non-P: and this is the vital aspect of the 'ripakya for the purposes of syllogism,—that it is non-P. But ripakya, in the sense of concrete cases of non-P, also has a doubtful contrast: on the one hand with the concrete SP--it is non-SP: and on the other hand with the concrete XP--it is non-XP. And in this sense it is not true that SP-XP (the equation which the Bauddha, really aims at making) because both alike exclude the ripakya. SP excludes non-SP: and XP excludes non-XP: and they are different because they exclude different things,—even on the apoha view of the meaning of terms: unless the Bauddha is prepared to admit that a cow is a tree on the ground that cow=not-non-cow, and tree=not-non-tree; and so both exclude the same thing—seeing that non-cow=elephants, etc., while non-tree also relephants, etc.;

In other words, vipakṣa (as meaning what is other than the pakṣa or anumeya) shares in the ambiguity of the term pakṣa or anumeya, which sometimes means abstract P and sometimes concrete SP. The Banddha has formulated his trairāpya or canons of syllogism as an affair of concrete SI and XP, however,—not in terms of relations between an abstract S ani an abstract P. But he now wishes to profit by the ambiguity of the term anumeya or pakṣa, so as to argue that SP really—XP in so far as both exclude what is other-than-the pakṣa,—which he now interprets to mean what is other than-I'. Vācaspati however holds him rigidly to the other meaning of anumeya or pakṣa, viz., the meaning SP: and thereby to the other meaning of vipakṣa, viz., the meaning non-SP.

(Väcaspati's attitude will lead to a difficulty which he does not raise, viz., that the sapakṣa is identical with the vipakṣa, in so far as both ere other-than-SP. This may explain Dharmakīrti's choice of the term asapakṣa, in place of vipakṣa, in the Nyāyabindu,—though that term would seem to entail the no less undesirable consequence that asapakṣa = pakṣa, as both excluding the sapakṣa.)

*nārṛkṣo gaur ity anayor api hastyādinivṛtlimātraparatvenābhinnārthayoh sāmānādhikaranyaprasangāt. (The na stands alone, referring to the iti cct of the preceding clause.)

The general meaning is that the application of the apohavāda to justify the identification of anumeya and sapakṣa—SP and XP—would prove too much; for it could also be applied to prove that a cow is a tree. If SP and XP are identical in so far as both exclude non-P, then a cow and a tree are identical because both exclude elephants and other things.

"Vācaspati concludes by saying that the doctrine of the samuccīyamānāvadhāraņa has not the authority of Dinnāga, and is in fact inconcistent with certain of his criticisms of the Vaiscsikas. (See Dinnāga Fraqments p. 16.) It is Dharmakīrti's own doctrine Samuccīyamānāvadhāraṇā, bhidhānam Kīrteh svātantryeṇa (NVT p. 129 last line).

CHAPTER IV

THE PROBANDUM

The nature and form of the probandum (anumeya), and the relation of the 'terms' in inference.

Meaning of the problem—Dinnaga on the probandum—Kumārila on the nature of the "terms" in inference, and on the 'probandum'—Uddyotakara's critique of theories of the probandum—His attack on the "major premise", i.e. the notion of inseparable connection in the abstract (avinābkāva)—His own view of the probandum—Kumārila on the form of the conclusion (=rejection of "Fourth Figure" arguments)—Kumārila's reference to Uddyotakara's theory.

SECTION 1. MEANING OF THE PROELEM

Vātsyāyana, in commenting on the sūtra (NS I. i. 5) in which inference is described, gives an illustration of pūrvavat inference,—' fire is inferred through smoke' (dhūmcnāgnih. NBh. p. 19 l. 2). He notes elsewhere the ambiguous use of the term 'probandum' (sādhya), pointing out that it is used to mean either the property qualified by the thing (sP) or the thing qualified by the property (Sp)—sādhyam ca dvividham: dharmivišisto va dharmah, šabdasyānityatvam; dharmavišisto va dharmā, anityah šabda iti (NBh p. 41 l. 10). But he does not specifically raise the question which Dūnāga, Uddyotakara, and Kumārila discuss:—What precisely is it that is inferred in an inference?

The earlier logicians were haunted by the ambiguity of the term $s\bar{a}dhya$ or anumeya. Dinnāga seems to have been the first to make a serious effort to lay this equivocal ghost (the eight lines in which he does so are fortunately cited by Vācaspati in NVT p. 120; see Dinnāga, Fragment 1.). Prašastapāda does not deal with this difficulty. Dinnāga was followed

Four views of the inferendum

The form of presentation tends to conceal the importance of the issue which is raised in this discussion. We are told that some held that we infer ' fire' from smoke, others that we infer the relation between fire and hill,—that Dinnaga rejected these views and held that we infer 'fiery hill',—while Uddyotakara rejected Dinnāga's teaching in favour of a doctrine that we infer 'fiery smoke.' The statement is, in a sense, accurate; but it conveys very little as to the real point at issue. We are told again that Uddyotakara denies universal connection (avinābhāva) of characters and take; exception to the assertion that wherever there is smoke there is fire. In a sense, again, this is true; but it gives us no understanding of the real meaning of Uddvotakara's apparently suicidal attack on the major premise. And the texts themselves, in spite of the deceptive simplicity of their phrases, do not say what they mean: they are easy to construe but difficult to understand.

The most interesting thing in the discussion is Uddyotakara's rejection of the major premise and his insistence that M and P have no connection except in S: and that the S again is not any S that happens to show M, but is M individualised,—SM (which is the meaning of the doctrine that what we are proving is, not that this hill is fiery, but that this smoke is fiery). It has certain affinities with the Aristotelian doctrine of 'essence', and Uddyotakara's attack on the major premise is of permanent value. But his parāmarśa (the realisation that SM is essentially SMP).

and criticised by Uddovatakara, who discusses this question in NV pp. 52 l. 11—54 l. 2.—Then comes Kumārila's discussion of the same topic, in Slokavārtika, anumānapariccheda, verses 23—53. He refers to Uddyoţakara's view.

The three passages are peculiarly difficult to understand. See HIL. p. 281 (= MSIL p. 88) for a statement of Dinnaga's view.

was not 'developed into a positive doctrine of individual essences which might have been a constructive substitute for the 'vyāpti' or abstract universal. And in any case, the doctrine of essences, whatever its philosophical value may be, has not proved easy to formulate as a workable logical doctrine. And it is not perhaps surprising that the ryāpti doctrine held the field in India, despite Uddyotakara's criticisms: just as the teaching of Aristotle's Prior Analytics (or the schools logic which developed out of that teaching) has in the West supplanted the more truthful therefore less easy teachings of the Posterior Analytics. Logic in practice is a rough-and-ready art, and tends to the convenient rather than the truthful formu-Thus both in the East and in the West the great class of reasonings which develop relational concepts has been ignored in the formulation of inference: for they do not proceed from a vyāpti or major premise on the one hand; nor do they lend themselves to formulation under Uddyotakara's interpretation of the dharmidharmabhāva rubric.—In another Uddyotakara's doctrine is a re-assertion of the original Indian view of inference as an affair of examples: for it insists that the connection of properties is in the concrete, and that (as J. S. Mill put it) " nothing is added to the evidence "by taking the properties in the abstract and asserting their inseparable concomitance apart from what possesses them.

SECTION 2. DINNAGA'S DISCUSSION OF THE PROBANDUM

Dinnaga refers to three solutions of the problem, and accepts the third.

The quality P as the probandum

(a) Some say that from one quality M we infer another quality (dharmāntaram) P.—The objection to

this account of inference is that when M is presented in experience it is either experienced with P—in which case we are not inferring anything new now, when we infer 'P': or else it is experienced in the concrete instance XP.—in which case we ought to infer not P in general, but that particular concrete XP.

The relation between S and P as the Probandum

(b) Some say we infer the relation between S and P, arguing that neither S nor P can be the probandum; since both are already known.—Dinnaga objects that (i) the anumeya (in one sense) must be universally predicable of the middle term. But we do not say that 'all smoke is a relation to fire'. We say that it is fiery. (ii) The anumeya (in another sense) is the thing qualified by the property. But we do not say that 'the relation is fiery'. We say that the hill is fiery. Language bears witness to the fact that the anumcya is (in one sense) fire, and (in another sense) the hill, i.e. it is Sas-qualified-by-P,—not the relation between S and P. The relation does not show these two aspects (sambandhe ' pi dvayam nāsti). Besides, if 'relation' were the object of the inference we should use tive case (parratasyāgnir asti) instead of the locative (parvate 'gnir asti). It is true that we may express our conclusion in the form parvato vahniman,—the hill possesses fire: and 'possession' is (according to the grammarians) just the significance of the genitive case. But this 'possession' is not the primary object of the assertion, being on the contrary only a subordinate element in the assertion (avācyo 'nugrhītatvāt)—nor is it what is asserted as concomitant with the middle term in the major premise [the major does not take the form "wherever there is smoke there is possession of fire."

It takes the form "wherever there is smoke there is fire."

S-qualified-by-P as the Probandum.

(c) What is inferred is the thing-as-qualified-by-the-property,—S-as-P. This is Dinnāga's own view. "The invariable concomitance of the mark with the property is seen in other cases: and being established therein it will prove the subject as joined with the property (i.e. it will prove S-as-qualified-by-P)."

The lines from Dinnāga in which the above discussion is embodied would hardly be intelligible in themselves. But the first part of Kumārila's treatment of the topic is an exactly parallel passage,—written probably with these lines of Dinnāga in view. The result is that Pārthasārathi Miśra's lucid comment on the passage in the Slokavārtika provides at the same time a valuable comment on the fragment from Dinnāga.

It will be convenient to translate first the first half of the Ślokavārtika passage, as being parallel to the criticism of Dinnaga: then to deal with Uddyotakara's criticism of Dinnaga: and finally to translate the second part of the Ślokavārtika passage.

SECTION 3. KUMĀRIĻA ON 'TERMS' IN INFERENCE

[Ślokavārtika, Anumānapariccheda, 23—34]

"Upāttas caikadesābhyāni dharmy apy atraikadesavān

Sabara's Bhāṣṇa on MS I.i.5 (p.10 l.H) has defined inference as jñātasambandhasyaikadeśadarśanād ekadeś-āntare 'samnikṛṣṭe 'rthe buddhiḥ---''knowledge, on the part of a man who knows the relation between the two terms, of the second term, which is a thing not present to

*sense, as a result of experience of the first term¹.''
Kumārila supposes an objection to be raised to this definition on the ground that it mentions the two terms (M and P of Western logic), but fails to mention the ekadeśin or ekadeśavat—the possessor of these two 'aspects' or 'terms'—the Subject (S of Western logic: pakṣadharmin, in Pārthasārathi Miśra's terminology: =anumeyadharmin, sādhyadharmin). He answers the objection in this line:—

"The Subject also, the possessor of the 'terms', is comprehended in the definition by mention of the two 'terms'".

24a. apārārthye hi dhūmādeḥ svarūpair naikadeśatā.

"For things like smoke (and fire) would not be terms at all simply in virtue of what they are in themselves; since they would have no reference beyond themselves".

He is here justifying his statement that mention of the Subject is comprised in the use of the word 'ekadeśa', 'term'. The meaning is that to call 'smoke' and 'fire' terms (ekadeśa) is to imply a Subject—since only in reference to a Subject could they be spoken of as ekadeśa.

In footnote 2 to the first page of the Note on the Indian Syllogism (Mind, XXXIII, n. s. no. 132—1924—p. 398) it was stated that "Indian logic has no generic name for the term". The statement needs qualification in view of the use of ekadeśa—in a sense very close to that of our 'term'—in the present passage of the Slokavārtika. And Dinnāga in one passage (Fragment N) uses amśa in the sense in which Kumārila here uses ekadeśa.—But it is to be noted that only the M and P are called ekadeśa. What we should call the third or minor term, the S, is contrasted with the ekadeśa's, M and P, as being ekadeśavat—the possessor of the terms. Therefore, if we are to render ekadeśa by 'term', we shall have to say that the Indian syllogism only has two 'terms': for S, the subject, is not a term, but a possessor of the terms.

24b. sa eva cobhayātmā'yam gamyo gamaka cva ca

"And it is just this, the Subject, namely, that is both at once, i.e. both probandum (P) and probans (M).

25a. asiddhenaikadesena gamyah siddhena bodhakah

"Through the unknown aspect of it the Subject is probandum—to be proved: and through the known aspect it is probana".

Pārthasārathi Miśra apparently says: "An ckadeśa or 'term' could not be the anumcya or probandum, because the term is apprehended at the time of grasping the connection (between the terms M and P); and that which is already apprehended cannot (as such) constitute the probandum—the thing that is to be proved. It is this fact that the Subject (pakṣadharmin) is the probandum, that is declared in the Bhāṣya by using the phrase 'not present to sense' (tasya' sambandhagrahaṇasamaya eva gṛhītāṣyā 'nanumeyatvāt. Tad idam pakṣadharmino 'numcyatvam asainnikṛṣṭagrahaṇena Bhāṣye darśitam)".

On 25a Pārthasārathi says: "He distinguishes the two aspects, as probandum (gamya) and probans (gamaka) in this line. The being probandum (anumeya) is in respect of the character of having fire (vahnimattvāt-

Pārthasārathi explains: lingilingaikadešavaltayā ubhayātmā, i.e. it is both probans and probandum because it has the two aspects—(i) of M, and (ii) of being a thing which possesses M. In the former aspect it proves P. In the latter aspect it is that of which P is to be proved.—It is rather difficult to find a formula which will serve to characterise the subject in this latter aspect. You cannot precisely call it sādhyadharmin, 'that which has the property to be proved, because this phrase is almost self-contradictory.—If we know that S has P, then P is no longer sādhya, to be proved. Juster logic uses the formula sanidigdhasādhyavat, to avoid this difficulty; but this formula is unsatisfactory too.—It is no doubt because of this difficulty that Pārthasārathi uses 'lingin' here.

²tasya ekadeśasya.

manā), which is asiddha in the sense of not being known by any other source of knowledge (i.e. other than the inference itself): the being probans (gamaka) is through the character of possessing smoke,—which is known by another source of knowledge' (i.e. by perception. The hill is perceived to have smoke, but the being on fire of the hill is to be inferred).

He introduces the next line with the question: "How then is this anumeyaikadeśin, or Subject quâ probandum, to be brought in (upādātavya) in the syllogism (sādhanavākya)"?

25b. atah pṛthag abhinno vā prayoktṛṇām vivakṣayā

"It is expressed differently according to the intention of speakers; sometimes as apart from, and sometimes as one with, the terms ". •

That is, you may indifferently express your inference in the form "the hill is fiery because smoky", or in the form "there is fire in the hill because there is smoke there"."

Pārthasārathi explains: pṛthag ekadeśābhyām vaiya-dhikaraṇyena, abhinnas tābhyām sāmānādhikaraṇyena.

-—It is apparently merely a question of the form of the proposition. If M and P are expressed as adjectives of S, it is said to be a case of sāmānādhikaranya: since when a thing is expressed as an adjective it is co ipso referred to the substantive as its locus—the adjective being samānādhikaraṇa with its substantive. But two substantives are vyadhikaraṇa, different in respect of locus, because each is its own locus. When an adjective

This latter will be the mode of formulation which Vātsyāyana had in mind when he said that fire is inferred by smoke. The fire here is treated pṛṭhak,—as separate from the hill. If however we say that what is inferred is 'fiery hill', we should be treating the hill and the fire as 'non-separate': for by turning fire into an adjectival form we are asserting sāmānādhikaranya.

is predicated of a substantive, the relation is that of identity—tādātmya, or abheda¹, e.g. in 'the hill is fiery'.

26. anityah kṛtako yasmād dhūmavān agnimān iti dharmyabhinnam upādānam, bhedo 'trāgnir itīdṛśe

"In such propositions as 'sound is transitory because it is a product', "the hill being smoky is fiery', the predicates are stated as identical with the subject: whereas in such a proposition as 'there is fire in it', fire is something separate from the hill, and is not predicated of it by way of identity ".

Kumārila seems to say:—It is a matter of indifference whether you state the members of your syllogism in logical form' or not. That may be left to the taste and fancy of the persons syllogising (prayoktīṇām vivakṣā). But in the verses which follow (and which are closely parallel to the lines from Dinnāga) he proceeds to point out that this does not mean that the probandum of the inference can be thought of as a mere 'P' out of relation to the Subject. On the contrary, the probandum is Sas-qualified-by-P. Neither P alone, nor S alone, nor even S plus P, nor even the relation (as such) between

The implication is that there are other forms of predicate in which the relation is not necessarily identity: and (presumably) the judgment that here is fire on the hill would be an example of this.—I am not clear on this mat—I append the following notes which I happen to have preserved is given—in by my teacher in Nyāya, the late Pandit Jīvanātha Miśra.

i) danda ūn puruṣa iti śābdabodhe abhedasambandhena dandavattā eva išeṣaṇatvam. daṇḍavān puruṣa iti pratyakṣādau tu samyogenaiva daṇḍasya išeṣaṇatvam. (i) ghato nīla ity atra rišeṣaṇam nīlaḥ, xišeṣyo ghaṭaḥ, adṇbhayā ambandhas tādātmyam—(i abhedas), atra nīlapadam nīlavati akṣakam.

abhedasambandhena—nilaprakārakaghaṭavišeṣyakašābdabodho bhavatt.

^{&#}x27;unis suggests that a judgment expressed in words (=\$\xi\text{abdabodha}\) cannot but state a relation of \$t\tilde{aditmya}\$ or abbeda, i.g. the logical form of proposition is necessarily subject... copula (of identity)... predicate:

Any here is that this form is optional. And this would seem to mean that a proposition can leave the predicate 'prthak', i.e. not reduced to identity (abbinna) with the subject.

S and P, can constitute the thing to be proved. Your conclusion need not be a proposition 'in logical form' joining P to S by a copula of identity $(t\bar{a}d\bar{a}tmya, abheda)$, but it must be a judgment $(visistaj\tilde{n}ana)$,—in other words S and P only constitute the probandum (or conclusion) in so far as they are related as qualification and thing qualified $(visesanavisesyatvam \bar{a}pannau)$.

- 27. ekadeśaviśistaś ca dharmy evātrānumīyate na hi tannirapekṣatre sambhavaty anumeyatā.
- 28. na dharmamātram siddhatvāt, taṭhā dharmī, tathobhayam vyastam vāpi samastam vā svātantryeṇānumīyate.
- 29. ekadeśasya lingatvam sādhyenānugamo 'sya ca dvayam ca na syādeiṣṭam sat pakṣeṣc eṣu yathākramam.
- 30. anityatvādayo dharmāḥ kṛtakatvādayo na hi dhvaninānugamo naiṣām nobhayasyobhayena vā.
- 31. sambandho 'py anupādānān nāmnā śaṣṭhyā pi vā mitau, na cāpy unugamas tena lingasyeha nidarśyate.

27 and 28. "It is S (dharmin) as qualified by the aspect or term (ekadeśa)P that is inferred: for without reference to this (tad=dharmin) there could be no probandum (lit., the state of being anumeya is not possible). Neither the quality, P, alone, nor the subject, S, nor both of them. collectively or distributively, can in itself be the thing to be inferred: because each of these things, in itself, was known prior to the inference."

^{&#}x27;They can be taken collectively without predicating one of the other-thill-and-fire'. Pārthasārathi points' ont that "tayor vyastayoh samastayor va anyonyāvisistarūpeņa nānumeyatvam."

). "Among these alternatives, if we take the cases in order (yathākramam) we find either (1) there would be no aspect of the pakṣa to serve as a middle term (ekadeś-aṣya lingatram na syāt); or (2) there would be no universal accompaniment of the middle by the major (sādhyenānugamo na syāt); or finally (3) both requirements would be absent (ekadeśasya ca lingatram, sādhyena cānugamaḥ—these are the 'drayd', the pair of requirements): although these requirements are desired to be present (iṣṭam sat)"."

i.e. taking the possibilities yathākramam:—

- (1) If our anumcya were 'non-eternality', kṛtak-atva would not be an ekadeśa of the anumeya 'non-eternality' so as to serve as the middle term of the argument: for, as he puts the matter in the next verse,—30 (a). "The qualities, non-eternality, etc., are not the ualities, 'being a product,' etc., which are to serve for middle terms". [In plain English we cannot say 'non-eternality (of sound) is the quality of being produced'—we cannot say 'the mortality of Socrates is his manhood. It is not. Mortality is mortality, and manhood is manhood. Men are mortal, and mortals may be men: but that requires a different formulation].
- 30 (b). (2) If again our proposition were about the existence of sound² you could not formulate a major premise in which the middle, kṛtaka, was asserted as universally accompanied by this anumeya, i.e., by śabda. It would be absurd to say "all products are sound: like a jar" (dhṛaninānugamo naiṣām. eṣām means kṛtakatvādīnām,—middle terms like kṛtaka).

i.e. if the dharma is taken to be the anumcya.

²i.e. if the *dharmin* were the *anumeya*. Pārthasārathi says śabdā-*\displaytrapratijnāyām. But it is impossible to formulate this theoretical possibility in which the *dharmin*, sound, is also the *anumeya*—as an actual inference.

- (3) If again our proposition were about sound-and transiency, then nobhayasyobhayena vā,—which Pārthasārathi explains by saying "na kṛtakatvasyobhayadharmatvam, sabdamātradharmatvāt ''. The meaning of Kumārila's words, confirmed by the phraseology of 29(b), dvayam ca na syād, seems to be that "there would not be co-existence of both the requirements (ekadeśasya lingatvam, and sadhycnānugamah) with both, i.e. with dharma plus dharmin, taken together as being the anumeya. Pārthasārathi's comment shows how ekadeśasya lingatvam is precluded,—viz., krżakatvasya śabdamātradharmatvāt. You cannot say that "word and noneternality are effects "because though 'word' is an effect, non-eternality is not. And sādhyenānugamah is also impossible, for we cannot say that "where there is krtakatva, there there is sound-and-transiency: as a jar ''—for the reason explained under (2) above.
- 31. (4) The fourth possibility is that the relation between the hill and fire, between sound and transiency, might be the anumcya. This is ruled out in verse 31 on the ground that the relation is not referred to in the inference either by using the word sambandha or by the use of a genitive (possessive) case—parvatasyāgnih², also on the ground that in the major premise (nidarśana) we do not say that the middle is universally accompanied by 'the relation between S and P.'

i.e. if the anumcya were dharmîn plus dharma. Pärthasävathi says sabdünityatvayoh sadbhävapratijääyäm.

²Pārthasārathi says "it is not ordinary usego to say 'parvatsuāgnia' asti"—'there is fire of or belonging to the hill'—or to say 'there is relation of fire and hill'.—Int it is ordinary usage to say parrate 'gnir asti, i.e. to use the eventh or locative case-inflection here.—What is the meaning of the insistence in all these passages (the fragment of Dinnāga, the Nuāyavārtika, and the Ślokavārtika) on the fact that we never say the fire of the hill though we do speak of fire on the hill?—The Indian grammarians hold that though there are seven case-inflections (viblakti), only six essential relations of noun to verb (kīraka) are to be expressed in a sentence: and these sinfled expression in five of the case-inflections. The six kūrakas are object to karma (expressed by the second viblakti: accusative case); agent (expresses, by the instrumental or third case-inflection where the verb is in the passive

32 - 34.

na cākāradvayam tasya śādhyasādhanabhāg bharet. tasmād arthagṛthītatvān matubarthasya gamyatā na svātantryeṇa mantavyā yathā daṇḍyādiśabdataḥ viśiṣṭārthapratītau syāt sambandho nāntarīyakaḥ viśeṣaṇaviśesyatvam āpannau dvār imāv ataḥ gamyāv

"Nor has the relation the two aspects (so that) it could play the part both of sādhya and sādhana (as the genuine anumeya can do). Therefore the possessive affix mat (parvato vahnimān dhūmavatlvāt) can only claim to be gamya or sādhya in so far as it forms part of the thing, and it is not to be considered such in its own right: just as in knowledge of a qualified object derived from a word like dandin, 'having a stick' '.'. (For, in this illustration, the stick is mentioned prakṛtyā, i.e. as the principal thing, while the relation is only referred to pratyayena, i.e. through the suffix. Pārthasārathi, ad loc.) "It is only where there is the thought of a thing qualified

voice, or by the verb-termination where the verb is in the active voice.—for the first or nominative case-inflection is not considered to have a kāraka-function); instrument, karaņa (third or instrumental case); the 'dative' or sampradāna of the action expressed by the verb (fourth or dative case); the 'ablative' or apādāna of the action (fifth or ablative inflection); the localive or adhikaraņa of the action (seventh or locative inflection).

Thus the sixth or genitive case-inflection has no kūraka-function: for it expresses the relation between nouns, and not between noun and verb. So Pāṇini II. iii. 50 says saṣṭhī seṣṣ—"the genitive is used in other senses" kūrakas, and other than that of the bare meaning of the noun (prātipādi-kūrtha, which with gender and number is conveyed by the first or nominative inflection),—for instance the relation between a thing and its owner (svasvāmibhāvādisambandha).

The genitive then is the inflection proper to more relation—sambandha—, i.e. to relations not integral to the action which is the life of the sentence-structure. So Diùnāga says in this fragment sasthī śrūneta tadvati the genitive would be used of one thing possessing another thing. We must suppose then that the position of those who held that what is inferred is the sambandha or relation between the hill and fire was not equivalent to putting the conclusion in the form 'fire is on the hill': for that would express a kāraka,—adhikarana, location.

by properties that we can have inseparable connection of properties¹.

Therefore these two (dharma and dharmin, P and S) can constitute the probandum of the inference only when endowed with the condition of being qualified-and-qualification with respect to each other".

SECTION 4. UDDYOTAKARA'S CRITIQUE OF THEORIES OF THE ANUMEYA

[Translation of the discussion in $Ny\bar{a}yav\bar{a}rtika^2$ (pp. 52-54)]

"Others give a different account" of the illustration which the *Bhāṣya* gives of *pūrvavat* inference, viz., that 'by means of that same smoke a man apprehends fire'. What precisely is it that a man apprehends

¹syāt sambandho nāntarīyakaḥ. Pārthasāratei says sambandhas to nāntarīyakatayā 'ragamyate--'but the relation is understood as insegarable.' There is parallelism with the language of Dincāga's definition of anumāna as nāntarīyakārthadarśanam---fragment G. It would seem that Kumārila is urging here the objection against avinābhāva which is urged by Uddyotakara also: see below p. 280 ff.

²On this Vācaspati remarks: tatra Dinnāgadūsitān kalpān, annāms ca vikalpān, Dinnāgasamarthitam ca kalpam upanyasya dūsayati...NVT p. 120 .l. 18. "He refers to and criticises the alternatives criticised by Dinnāga, and other alternatives, and the alternative accepted by Dinnāga".

[&]quot;The Bhāṣya (p. 42) has suggested that the rat in pūrvavat is the vatipratyaya, i.e. vat in the sense of 'like', so that pūrvavat means yathā pūrvam : atha vā pūrvavad iti yatra yathāpūrvam pratyakṣabhātayor anyataradarśananānyatarasyāpratyakṣasyūnumānam, yathā dhūmenāgnir, iti—'or else pūrvavat is the name applied where, of two things which have been (previously) perceived, we infer the one not now present to sense from seeing the other—'as before'; as we infer smoke by means of fire''. Uddyotakara first takes the 'as before' to apply to the object inferred—'as the object was experienced before in perception, so just that same object is now apprehended through inference'. But, he says, others connect the 'as before' with the thing through which the inference is made, interpreting Vātsyāyana to mean that 'by means of just that very smoke which was previously experienced a man apprehends fire'—tenaiva dhūmenāgnim pratipadyate.

⁴Dr. Jhā misses the connection of thought because he ignores the evaluere. And the point of the discussion which now follows is obscured unless the connection here is realised. The peculiarity of Uddyotakara's view of

through that smoke? Is it (a) fire, or (b) place, or (c) existence, or (d) fire-possessing place? Not fire: because a relation of property and property-possessor is not possible between them,—that is to say, fire is not a property of smoke, nor is smoke a property of fire: and further because fire is already apprehended, and therefore cannot be the thing to be proved (anumeya). And the

inference is just this, that he refuses to admit that the smoke through which we now infer—whatever exactly it is that we infer—is the identical smoke of past experiences. In order to elucidate this point he proceeds to raise the further question 'what exactly is it that we infer?' And the answer to this question which he finally gives seems to preclude the possibility of holding that the fire which we are said to infer is just exactly the fire of previous experiences. So that the position is that neither the fire inferred nor the smoke through which we infer it can be just that smoke and just that fire which we have previously experienced. What we infer is this smoke-as-qualified-by-fire: and the means by which we infer it is again this smoke with all its concrete characteristics.

This means that Uddyotakara definitely rejects the view of inference as based on a $vy\bar{a}pti$ of smoke by fire. The formulation of a 'major premise' (where there is smoke there is fire) is only of use to those who admit that the smoke and fire of previous experience are the identical smoke and fire of this particular case. But Uddyotakara's view is that we argue from likeness ($a\bar{a}dharmya$), and not from identity.—That is, the $yath\bar{a}$ in $yath\bar{a}$ - $p\bar{u}vam$ does not signify identity, but likeness.

This explains (1) the attack on $avin\bar{a}bh\bar{a}va$ embodied in the present passage, (2) the acceptance of inference from cause to effect, which if based on a $vy\bar{a}pti$ or connection or abstract characters would be $savyabhic\bar{a}ra$, i.e. would involve an undistributed middle term. If we are arguing from the cause in the concrete (not from mere clouds to impending rain, but from just these particularly-characterised clouds to rain) we can as well argue from cause to effect as we can from effect to cause.

The whole thing may be otherwise expressed by saying that he substitutes parāmarśa for vyāpti as the nerve—the karana or instrument—of inference. The parāmarśa is the realisation that this particular case of M, under the concrete circumstances, must carry P with it. He will have nothing to do with assertions, in the abstract, of M being always P.

'dharmadharmibhāvānupapatteh. The principle here appealed to is stated by Vācaspati Miśra NVT p. 120 l. 20—dharmena hi dharmī pratipattavyo nānyathā. It is always a property-possessor SP that is apprehended through a property M, i.e. it is not P that is apprehended through M. Similarly Dinnāga condemns the view that dharmāntaran meyam,—that another property is what is inferred through M: and Kunfarila insists that an ekadeśin is implied in Sabara's statement that from seeing one ekadeśa (M) we apprehend another ekadeśa (P); and in verso 35 states Vācaspati's principle in similar words—sarvathā dharmino dharmo dharmena tv avagamute. Socrates is mortal and Socrates is human: but mortal is not human, piether is human mortal. It is of this or that possessor of humanity that mortality is to be inferred.

same reasoning covers 'existence', and 'place',—the existence of fire, and place, are already apprehended.

"If again you say that place-as-possessing-fire is the probandum,—No! because the smoke is not the property of this'.—You mean that fire-possessing place might be inferred through the smoke. But this is not the case. Why? 'ataddharmatvāt'. That is, the smoke is not a property of fire-possessing place² (as such). Nor can it be said that relation of fire to place [as such] is unknown " (and therefore fit to be proved. It is already known that fire is related to 'place', i.e. has a local habitation).

(The opponent now answers: "Yes, but what is meant is that) 'This fire-possessing place is the probandum".

In the next sentence Uddyotakara, more suo, amplifies in commentary-form the aphoristic brevity of the first statement—na, dhūmasyātaddharmatvāt. This is an excellent example of the numerous passage in which Uddyotakara conveys the impression of commenting on a citation. In Dr. Jhā's translation the second sentence reads like mere repetition of the first: and the same impression of tautology is given in other passages where Uddyotakara svoktanh vivrnoti 'comments on his own statement'. To readers of the translation these tautologies sometimes seem inexplicable, and confuse the train of thought.

²Uddyotakara takes agnimān dešah first in the sense of unspecified fire-possessing place, place in general so far as fire-possessing. The absence of a definite article in Sanskrit makes such misunderstandings always possible: and it is necessary to force one's opponent to say exactly what he means by taking his statement first in the impossible sense.—But for the same reason there is ambiguity in Uddyotakara's answer dhūmasyātaddharmatvāt, which might either mean (as I have rendered it) that the smoke is not a property of fire-possessing place in general, or else that smoke is not so. In the latter case the meaning of the retort is no longer obvious: for the opponent might say that smoke as such is a property of fire-possessing place as such: a statement which would be an arinābhāva or universal proposition. Uddyotakara's criticism of such universal propositions is given below: he rejects them. But as his refutation of the avinābhāva has not yet been given it is easier here to take dhūmas jātaddharmatvāt in the sense 'the smoke is not a property of fire-possessing place as such'.

This is Dinnāga's own view, and Uddyotakara now proceeds to reject it. But I think that what has just preceded is also directed against Dinnāga, and that Uddyotakara's point against Dinnāga, both here and folionis criticism of the trairūpya (anumeye 'tha tattulye, etc.) is that Dinnāga uses the term anumeya equivocally. For the purposes of his vyāpti of major premise he takes 'fire' or 'fire-possessing place' in the unspecified sensor

That is, you mean that the particular place is inferred as possessing fire. But the reasoner does not see this particular place—so that he cannot state 'this particular place is fiery': they would be meaningless words, and no more'." (The translator explains: 'the actual place from where the smoke is issuing is not seen by the observer'. And this is at least a possible explanation. The remainder of the translator's note is, I think, mistaken².—I'ddyotakara's criticism is meticulous. The observer can particularise the place sufficiently without seeing exactly the spot from which the smoke is issuing. He docs particularise it in calling it the hill: and he certainly sees the hill.)

of fire as such. That will expose him to the criticism just stated, if he takes the conclusion in this unspecified sense.

¹The punctuation of the text is wrong. The passage should read: kevalam tu $k\bar{u}nyam$ abhidh $\bar{u}nam$ ucc $\bar{u}rayati$ ayam deko 'gnim $\bar{u}n$ iti. (NV p. 52 last line).

²If it is a mistake, however, the mistake is Vācaspati's; for the translator's following him in the second part of the note to p. 173 of the translation. See NVT, p. 120 (last two lines):-na hy ayam cramvādī Dinnāgo dhūmādhāram dešavišesam pašyati, na hy asya mate parvato nāma kašcid wayarī, yadādhāro dhūma upalabhyeta : kimtu paramānavah paramasūksmā atindriyāļi sarvataļi, evam dhūmo 'pi tādṛśa eva, yathā rakṣyati--'sarvā-grahaṇam avaṇavyaṣiddher' iti (NS II. i. 31). ''For he, is Diṇnāga who is expressing this view, does not see the particular place which is the locus of the smoke. For on his view wholes do not exist, and therefore there is no such thing as the mountain,—a whole which might serve as the locus of the smoke; but the 'mountain' is exceedingly minute imperceptible atoms: and the smoke too will be just the same. As the sūtrakūra puts it later espeaking from the Bauddha standpoint) there will be non-apprehension of everything, because wholes are not established as existing." I doubt whether Uddyotakara meant this,-In any case it would only serve as an argumentum ad hominem against the Banddha, and will not affect the mosition of those who believe in the reality of mountains and hold the resent view. Vācaspati is conscious of this, and he therefore goes on to give the interpretation of Uddvotakara's argument which I have embodied in my rendering. "yeşām api desabhedo "vayavī darsanārhah teşām api rivadvartinim dhūmalekhām abhramlihām upalabhuānupalabdhadesānām nānumānasambhavah.—'For those too who admit differences of place in the form of wholes which admit of being seen, an inference could not arise when they saw a streak of smoke in mid-air reaching up to the clouds without seeing any particular place (which might serve as locus of origin of the smoke)".—Uddyotakara's real objection is probably as given in the following footnote,—however we interpret the present paragraph.

"Nor can you say that it is smoke as such that brings about the apprehension of fire: or (if you do say this) then 'smoke as such' is what the observer sees; and the consequence of this will be that it is not the particular place that is inferred (as fiery)."

SECTION 5. HIS REJECTION OF THE NOTION OF UNIVERSAL CONNECTION

In connection with the suggestion just made—that fire is inferred from smoke as such,—Uddyotakara proceeds to an examination of the notion of avinābhava, or inseparable connection, between smoke as such and fire as such². The passage is particularly significant because it appears to define Uddyotakara's attitude towards

'This rendering is a conjecture, arthāpatti, derived from the impossibility of getting sense out of the passage in any other way that I can discover. It differs widely from Dr. Jhā's rendering "if he asserts the conclusion in the form 'this place contains fire', he makes an empty, meaning less assertion; specially because mere smoke (univerceived) cannot bring about the cognition of fire, and the Bauddha philosopher can never perceive the smoke (which, like everything else, is imperceptible);—for these reasons any particular place cannot be regarded as the object of inference.'' The suggestion that the Bauddha philosopher is incapacitated from seeing smoke comes from Vācaspati: otherwise Vācaspati makes no comment on this sentence. The Sanskrit is:—na ca dhumamātram agnipratipādakam dhūmamātre vāyam pašyati ato dešavišeso nānumeyaḥ. I think the argument is that, it Dinnāga argues (as he does) from a connection between smoke as such and fire as such in his 'major premise', he has no right to think of the smoke of the minor premise as this particular smoke,—and consequently no right to draw a conclusion about fire in this particular place. Put as an objection against Aristotelian syllogism—

M in general is P in general. This is M in the particular.

Therefore this is P in the particular—it amounts to a charge of quaternio terminorum (or rather a quinio terminorum). You cannot argue from a special M_4 in the minor, and a general M in the major. (This is recognised in certain cases by our schools logic in its rubric of 'fallacy of accident').—This difficulty seems to have weighed so heavily in Uddyotakara's mind that he was led to deny the function of the universal proposition altogether. Hence the attack on $avin\bar{a}bh\bar{a}va$ (=the universal proposition) which now follows.

²See Keith ILA pp. 104-105. Keith connects the passage at NV p. ⁵⁶ with the present passage. His statement with regard to the former passage that "Uddyotakara carefully refutes a doctrine which attributes the name

the doctrine which is usually regarded as the outstanding contribution of Prasastapāda and Dinnāga to the theory of inference.

"It may be suggested that smoke NV p.53 1.2. causes us to apprehend fire through inseparable connection (avinābhāvena). That is: there is an 'inseparable connection' between smoke and fire; and as a result of this a man comes to apprehend fire from seeing smoke.—This view is wrong, because every interpretation of it that can be given turns out to be impossible (vikalpānupapatteh). For what is meant by an inseparable connection between fire and smoke? Does it mean causal connection? or inherence [of both] in one thing, or of one thing [in them both]? or simple relation of the one thing to the other thing (tatsambandhamātra)? (1) Suppose the first alternative, that indissoluble connection of smoke and fire means relation of cause and effect. It is impossible, because this does not reside in that (atadvrttitvāt): smoke does not reside in fire, nor fire in smoke; because each of these resides in its own (material) cause. For this reason the 'indissoluble connection' cannot consist in a relation of cause and effect between them¹. (2) Nor is the second

of syllogism to the demonstration of something as inseparably connected with something else", refers to Uddyotakara's criticism of the definition of anumāna (instrument of inferential knowledge) as nāntarīyakārthadaršanam tadvidah (seeing something which is inseparably connected with something else, when the person who sees it has knowledge of the inseparable connection). (This definition is Dinnāga's fragment G). But Uddyotakara confines himself to criticising the form of statement of this definition—the word artha is superfluous; the compound is an unjustifiable karmadhāraya, and yet cannot have any other sense; the qualification tadvidah is superfluous. So that the passage throws no light on Uddyotakara's own position. (Neith is mistaken in his statement that "Uddyotakara objects that, as on the Buddhist view everything is indissolubly related to everything else, the knowledge in question of a thing as indissolubly connected is no more than knowledge sans phrase, and not inference." See Fragments from Dinnāga, p. 22 and n. 1.)

The argument is baffling, because ite ignores any kind of causation (samavāyikāraṇatā). Vācaspati Miśra says

alternative possible: (a) smoke and fire are not constituent causes of some one thing which resides in them as constituted effect: for a substance is not constituted by two heterogeneous things: (b) and the supposition of their both residing in a third thing which is their constituent cause, has already been set aside by saying that 'each of these resides in its own (material) cause'. (3) If it be said—the third alternative—that [at any rate] there is relation (sambandhamātra—relation without further specification) of smoke and fire, in that way too the inference is impossible. That is: How if the defendant contents himself with the assertion 'there is a relation' between smoke and fire'? The answer is that this view is not tenable,—we cannot infer relation² between smoke

that only material causation is considered because the other two kinds of causation will not be eases of 'inseparable connection'. Thus in the case of efficient causation it is not the case that wherever the effect is found the efficient cause is found (na kāryasattā nimittakāraṇasattayā vyāptā...na hi yadā yatra vā paṭas, tadā tatra vā kuvindah—''it is not true that wherever and whenever there is cloth, there and then chere is a weaver''. And in the third kind of causation, that of asamavāyikāraṇatā (the relation through which the properties of the threads are the cause of the properties of the cloth, for example), it is equally untrue that wherever the effect is found its asamavāyikāraṇa must be found (na hi yadā yadā samyogas, tadā karma,—''it is not the case that whenever there is contact the effect of the contact is produced''. Jhā takes this in the particular sense: ''the cloth is present also when the contact with the loom is not present'').

anumātum na šakyate and na sambandhānumānam. It is not conceivable that Uddyotakara should have spoken of an 'inference' of universal connection between fire and smoke. So far as I am aware there is nowhere in Indian logic the notion that 'induction' or generalisation is an inferential process.

"Vācaspati glosses sambandhamātra by samyoga: that is, he understood the present 'view to assert that smoke and fire are two substances in contact. Vācaspati states the 'form' (prayoga) of the inference in the shape 'there is relation of smoke and fire, as a result of smoke' (asti sambandho 'gnidhūmayor dhūmad iti), i.e. from smoke we infer contact-with-fire. Now this implies a 'major premise.' 'Wherever there is smy.ke there is contact-with-fire'.—Uddyotakara's point is that we have 'had no such experience as would justify this vyāpti of smoke by agnisamyoga, 'contact-with-fire'. For we often have experience of anagnika-dhūma: wipeb then means smoke not in contact with fire.

and fire, because no such relation has been apprehended: that is, because we see smoke also in the absence of fire.

(A Bauddha however, as Vācaspati points out, does not believe in substance: and therefore he would not think of the relation between fire and smoke as a case of samyoga between substances², but—like all other connections, e.g. that of colour and tangibility—as a case of ekasāmagryadhīnātayā niyatasāhacaryam, 'determined concomitance through dependence on one and the same aggregate of conditions'. Uddyotakara therefore proceeds to ask whether the Bauddha's 'concomitance' will provide for avinābhāva or universal connection).

The opponent now suggests that "the relation between fire and smoke will be concomitance,—like the concomitance between the two qualities of colour and tangibility in what are supposed to be substances". Uddyotakara replies:—"This will not serve your purpose: because the two are not always found together (and so mere concomitance does not amount to universal connection, avinābhāva). Smoke is sometimes seen without fire, and fire without smoke, and so (the experience of) their connection is not invariable, and therefore concomitance"—as implying universal connection—cannot be asserted."

We must not understand Uddyotakara to be maintaining the rather desperate position that smoke can exist without fire. Keith takes this view of the passage ILA p. 105 "Uddyotakara admits that there are exceptions to the rule of indissoluble union even in the case of smoke and fire, since not only does fire occur without smoke, as is generally admitted, but also smoke without fire, which contradicts the fundamental assumption of the stock syllogism of the schools". It also contradicts the postulates of our experience, and would certainly come under the ban of Udayana's principle: vyāghātāvadhir āšankā—doubt finds a limit in contradiction of experience: and, more particularly, it contradicts Uddyotakara's own doctrine of the lingaparāmarša. See further footnote 3.

^{• 2}NVT p. 121 l. 18—na hi Bauddhasiddhānte dravyam nāma kimcid asti yatra rūpasparšau samavetau, kimtu ekasāmagryadhīnatayā niyatasāhacaryau tathā vahnidhūmāv ani bhavisyata ity arthah.

But does not this amount to what was characterised above as 'the desperate position that smoke can exist without fire?' I do not think that it

"The formula 'where there is smoke 'there is fire' is rejected by the very same reasoning. And there is no other way of interpreting the 'inseparable connection' of smoke and fire (except those mentioned).—Therefore it is not true that 'fire is inferred through smoke.'"

SECTION 6. HIS OWN VIEW OF, THE ANUMEYA

"Does it not contradict common experience to say that we do not infer fire through smoke?—There is no such contradiction (replies Uddyotakara): what we infer is that the smoke has fire as its property; and we infer this through the nature of the smoke (dhūmaviścṣenāgniviśeṣ-anasya dhūmasya pratipādyatvāt).—But (it may be asked) how is fire a 'property' of smoke?—The answer is: when it presents itself as a quality (yadā gunabhūto bhavati). The probandum is 'smoke-as-fiery': and it is proved or inferred through the specific nature of the smoke (dhūmaviśeṣeṇāsādhāraṇenānumīyate). For both are at that time present to sense—the smoke, and the characteristics of it such as its forming an unbroken mass moving upwards. And these characters of the smoke, as observed in it,² bring about the inference of a char-

does. His words are: anagnir dhūmo dṛṣṭo 'dhūmas' cāgnir ity ubhayam vyabhicāri. tasmān na sāhacaryam. Sāhacarya has been so emptied of content by the Bauddha that the only shred of meaning left is 'togetherness in space or time'. Now, as a fact, there is no such togetherness: smoke and fire are often experienced separated in space and time: as when the smoke continues after the flame has vanished.

^{&#}x27;This 'yatra dhūmas, tatrāgniḥ', is Prašastapāda's vidhi or formula for the nidaršana or udāharaṇa, the third member of the syllogism. See PBh p. 205 l. 10. And Uddyotakara is referring to Prašastapāda's view'in this sentence. Vēcaspati explains by saying: tasyāpi sāhacaryavišeṣatvāt,—'this, too, is 'a form of the 'concomitance' doctrine.'

Elsewhere, when he is analysing a concrete argument, we find an insistence on the individuality of the probans: for example he says that we can infer impending rain (effect)—not indeed from clouds as such—but in the form 'These clouds will bring rain,—because they are rising, being, as they are, accompanied by deep rumbling, having many lines of cranes

acter not known (directly) to the observer. In the case of every object that is a probandum (sarvasyānumeyasya vastunaḥ), the subject of the characters and the character that brings about the conclusion (dharmī pratipādakaś ca dharmaḥ) are known. For instance (in the inference 'sound is transitory, because a product') sound is known as what it is, and the fact that it is a product is known (śabdasyātmasattā prasiddhā kṛtakatvam ca): but the character consisting in being transitory is not known (dharmas tv anityatvalakṣaṇo 'prasiddha iti). And it is this (latter character) that is inferred as a qualification of that (i.e. of sound). (Tadvišeṣaṇo 'yam anumīyata iti.)¹

Misunderstanding of Uddyotakara's view is easy. It is said that Uddyotakara taught that from smoke we infer not fire, nor place, nor fiery place,—but fiery smoke. But Uddyotakara taught no such ineptitude as this, as a

flying through them, flashing with lightning,—like other rain-clouds perceived in the past' (Jhā's translation of NV p. 49 l. 17). He is here justifying the argument from cause to effect—which is invalid in the abstract: but on Uddyotakara's view of the probans as concrete we can just as well argue from cause to effect as we can from effect to cause. Cause and effect, seen within the individual whole of which they are essential aspects, are completely reciprocal.

'Uddyotakara's view of inference is essentially a protest against an abstract formulation of the connection of M and P resulting in a correspondingly abstract conception of S. His point is that in the first place (1) there is no meaning in the assertion of a universal concomitance of characters (dharma) in the abstract. It is impossible to assert such connection in any intelligible sense,—vikalpānupatteh, because in any sense which you may try to assign to it it is meaningless. M and P, the dharma's, simply fall apart if you abstract them from S, their dharmin. And, in the second place, (2) the subject or dharmin, S, must be the subject to which those dharmas, M and P, essentially belong. In the inference of "fire from smoke" (to adopt the ordinary but inaccurate phraseology which Uddyotakara is criticising here) the hill is not the essential S or dharmin. What the essential subject of an inference is in fact a difficult question in each case; and Uddyotakara may be wrong in his analysis of this particular set of facts when he takes 'smoke' as the dharmin. But it is difficult to deny the principle on which his criticism is based. The principle is that you must see M and P essentially connected in and through a system S, before your inference can reach demonstrative certainty. If you make M and P abstract universals, then S becomes an abstract particular with which P can never be connected; and P loses all connection with M at the same time.

general answer to the question, 'What is the anumeya?' He is dealing here with a particular case—as Vācaspati Miśra points out: the case of two things (smoke and fire) happening to co-exist in a third thing (the hill), to which their relation is accidental. And in such a case it can happen that the third thing (the hill), which is so to speak the accidental dharmin of these dharma's, may not be present to sense: and then it becomes plain that accidental dharmin is no essential part of the anumcya: so that Dinnaga's statement that 'fiery place' is the probandum is seen plainly in this crucial instance to misrepresent the essential nature of a probandum. The essential dharmin of the inference is just "this particular smoke"—the individual case in which both characters find essential connection. Uddyotakara is not trying to banish the S or Subject of an inference: on the contrary he explicitly says that there can be no inference without a dharmin—Sarvasyānumcyasya vastuno dharmī pratipādakaś ca dharmo prasiddho bhavati (NV p. 54 l. 1). He insists not less, but more, than Kumārila, that the inference involves an *ekadeśin* as well as two *ekadeśa's*. he insists further, as against Dinnaga, that the real ekadesin or minor term of an inference is not something accidental to the *ekadeśa's*. In the case of an inference such as 'sound is transitory, because a product' Uddyotakara would not say that the anumeya is 'transitory product': he would say, what Dinnaga or Kumārila would say, that the probandum is the transitoriness of sound. In this inference sound is the essential dharmin: it is in the ātmasattā of sound—in sound as being sound that the two characters inhere,—and by so inhering are essentially connected. If the characters are abstracted from their dharmin they fall apart. For their connection is in the concrete, and not in the abstract. Therefore to state the vyāpti as Dinnāga and Prasastapāda state. it, i.e. as an avinābhāva or inseparable connection of the

dharma's or ekadeśa's (M and P) in the abstract amounts to a false abstraction. The true nature of inference can only be represented when it is formulated as depending, not on a major premise stating an avinābhāva, but on a parāmarśa or realisation of characters as connected in the individual.

SECTION 7. KUMARILA ON THE FORM OF THE CONCLUSION

(Ślokavārtika, Anumāna pariccheda, verses 34—48)

Having established his own view that the probandum is constituted by the Subject and the Property after they have come into the relation of qualification and thing qualified with respect to each other, Kumārila, in the first part (verses 34—48) of the present passage, raises a further question—which of these is the thing qualified and which the qualification? That is: do we infer the hill as qualified by the fire? or may we infer fire as qualified by residence in the hill? In other words, must my conclusion take the form 'the hill is fiery'? or may it also take the form 'fire has the qualification or predicate of residence in this hill?'

¹Cf. p. 261 supra. The distinction exactly corresponds, to Vātsyāyana's distinction between dharmavišiṣṭo dharmā and dharmivišiṣṭo dharmaḥ.

It is difficult (and precarious) to translate an Indian con'roversy into our thought-forms. But this question does seem parallel to our question whether the fourth figure is a justifiable form of syllogism. From the knowledge that smoke is accompanied by fire and the perception of fire on this hill must I conclude in the form 'This hill is fiery' (BARBARA); or may I optionally conclude in the form 'Some fiery thing is this hill' (BRAMANTIP)?

⁽The barbarous form of the latter conclusion is of course alien to Indian thinking, which—rightly as it seems to me,—ignores the 'particular' proposition.)

(a) Verses 34—48.

. . . angāngibhāvas tu kaiścid iṣṭo vikalpataḥ sarvathā dharmiṇo dharmo dharmeṇa tv avagamyate.

34 b.

"Some however think that the relation of qualifier and qualified is optional: although in every case it is a quality of a subject that

is apprehended through a quality (of that subject).

viśesanaviśesyatve na viśeso 'vadhāryate.

35 b.

"The distinction between being the qualification and being the thing qualified is not a fixed distinction".

angāngibhāva must here mean Comment. viścsana and viścsya. Dr. Jhā accordingly translates the first line: "The relative predominance of these two is by some people held to be op-It does not matter whether you make 'this hill' the subject or viścsya, qualified by 'fire' as predicatenotion or viścsana: or whether you make 'fire' the subject-notion, qualified by (residence in) 'this hill' as predicate-notion.—But, whichever form of statement you adopt, it will remain the fact that the hill is the dharmin of which one character or dharma (fire) is inferred through another character or dharma (smoke). Dharmin and dharma are fixed notions, though viśesya and viśesana are not.

36-38a.

tatrottaram vadanty anye "yadi dharmī viseṣaṇam hetudharme na sambandhas tasyāprādhānyataḥ sphuṭaḥ. pradhānatvād dhi dharmeṇa sambandho vākyato bhavet, tatrāsambhavataḥ paścat kalpyo 'sau dharmiṇā saha', dhvaner ity atha vā vācyaṃ. anvayasya tu darśane bhedopāttasya dharmasya guṇabhāvo na duṣyati'.

36. a.,	"Others reply: if the property- possessor or <i>dharmin</i> is taken as the
36 b.	predicate notion or viśesana, then, be-
	cause the <i>dharmin</i> is no longer the leading conception, the connec-
	tion would not be plain in the case of the <i>probans</i> -property, because the
	dharmin is not the leading conception or subject in the 'Proposition'.

For, as a result of the structure of the syllogism, the connection (of the middle) would be with the 'dharma', as that becomes the leading conception (in the 'Proposition').

And, since connection with the dharma is not possible, the relation of the middle will have to be conceived subsequently as together with the 'dharmin': or else the phrase 'of

sound' will have to be added to the statement of the middle.—As to the grasping of the 'major premise' there is no difficulty in the fact that the *dharma* has formed the adjectival concept in the proposition: for it is separately stated in the major premise."

Comment. The view under consideration is that, in the argument 'sound is transitory, because a product', the 'proposition' (or, which is the same thing, the conclusion) may take the form 'transitoriness resides in sound'. As Pārthasārathi Miśra

37 b.

38 a.

¹I take Kumārila as accepting this view.

²It is necessary to read a negative into this line, 36b, as Dr. Jhā does (without comment) in his rendering. Read—dharme na for the textual-dharmena.

phrases it, in the Proposition we should have anityatvam śabdagatam (instead of the direct and usual form śabdo 'nityah, 'sound is transitory').—But the second member of the syllogism, the hctu, is kṛtakatvāt,—'on account of being a product'. The connection of this will naturally be with the concept that is the *subject* of the first member of the syllogism. If we say 'sound is transitory on account of being a product' all is clear: 'being a product' is seen to be a predicate of sound. If however we say 'Transitoriness resides in sound, on account of being a product', the structure of the sentence is no longer transparent: we shall have to explain it by saying 'on account of its (i.e. sound's) being a product'. The relation (asau = sambandhah) of the character of 'being a product', since it is impossible (asambhavatah) in 'transitoriness' $(tatra = anityatve)^1$ must either be understood (kalpya) by an afterthought (paścat), as being with the thing that possesses transitoriness, i.e. 'sound'; or else the relation to 'sound' must be explicitly stated (vācya), by adding the word 'dhvanch' (i.e. śabdasya) to the statement of the reason 'krtakatvāt', which will then become śabdasya krtakatvāt—'on account of sound's being a product'.

The concluding line and a half are thus interpreted by Pārthasārathi Miśra: "It may be objected that" (when the proposition—or conclusion—is stated in the usual form 'sound is transitory') "the universal statement 'whatever is a product, is......" would, when the occasion for stating it arises " (darśanavelāyām i. e. at the time of stating the third member of the syllogism) "be understood as a connection with just 'sound', which plays the part of leading concept in this form of the Proposition,—instead of being understood as a connection of the middle term with the character 'transitoriness',—

i.e. The sentence cannot mean on account of transitoriness being a product'.

which character has been stated in the Proposition as a predicate-concept (yuṇabhūtenānityatvena -i.e., anityah sabdah is a proposition in which anityatva figures in the adjectival form of anitya). The author's answer to this objection is that the difficulty does not arise: because as a matter of fact in the third member of the syllogism —which has the form 'whatever is a product is transitory'—the character 'transitoriness' is mentioned again; so that there can be no possibility of misunderstanding what is universally connected with the middle term (i. e. no room is left, in the accepted formulation of the syllogism, for the suggestion that the charge of failure of transparency of connection can be brought against the third member of the syllogism, on the usual formulation of the proposition as 'sound is transitory'.—The critic of the formulation 'transitoriness resides in sound'. has said that this formulation prevents the second member from having a transparent meaning. The retort is that, on the usual formulation, the third member fails to have a transparent meaning: for the syllogism will then run:—

Sound is transitory,

Because.....is a product,

And whatever is a product is.....

If you say that the blank in the second member must be filled in as 'sound' you ought to say that the blank in the third member must be similarly filled in—so that your 'universal' takes the absurd form 'whatever is a product is sound'.—The reply is there is no blank to fill in, in the accepted formulation of the third member, which explicity mentions transitoriness as universally connected with the characters of 'being a product').

^{&#}x27;Cf. Uddyctakara's phrase (NV p. 53 l. 19) katham punar ayam agair 'dhāmavišesanam bhavati? yadā gunabhūto bhavati.' 'Fire' is a qualification of 'smoke' (in the conclusion as stated by Uddyctakara, viz., 'this smoke is fiery') in the sense that it is stated as an adjectival concept predicated of smoke.

- 39-48a. Agner deśāviśiṣṭatve na caitat pakṣalakṣaṇam. viśiṣṭatā 'sya deśena bhaved evamprakārika:—
- 40 yo'gnih so'sti kvacid deśe, yo drsto yatra tatra vā agnih pūrvānubhūto vā deśamātreņa sangatah.
 - 41. yo 'gniḥ so 'nena yukto vā, yo dṛṣṭo 'nena so' tha vā yo 'yam sa deśamātreṇa yuktaḥ, pūrveṇa vā 'py ayam,
 - 42. etaddeśaviśisto vā yo 'yam agnir. itīha tu pūrvayoh siddhasādhyatvam, pareṣu syād viruddhatā.
 - 43. vyāptir anena deśena sarvāgnīnām na yujyate, nāpi pūrvasya, nāpy eṣa vahnih sarvair viśiṣyate
 - 44. deśaih, pūrveṇa vā 'py asya na deśena viśeṣyatā. etaddeśaviśiṣṭo 'yam ity etat kathyate katham?
 - 45. yadā deśānapekṣo 'gnir nāyam ity avadhāryate, agneḥ pūrvataram cātra deśa evāvadhāryate,
 - 46. tajjñānakālabuddhaś ca na deśaḥ syād viśeṣaṅam. deśasya parvatādes tu svarūpe pāvakād ṛte
 - 47. gṛhīte 'gniviśiṣṭasya punarjñānam na duṣyati. tasmād dharmaviśiśṭasya dharmiṇaḥ syāt prameyatā:
 - 48. są dcśasyāgniyuktasya.
- 39 a. "When 'fire' is not' taken as the thing qualified by 'place' (i. e. if we reject—as we do—the view that the proposition, 'this place or hill is fiery', may be taken in the form 'fire resides in this place'), the various possible interpretations of the meaning of the proposition which we now proceed 39 b. to give will not apply. When 'fire' is taken as the subject qualified by

^{&#}x27;agner deśāviśiṣṭātve. Dr. Jhā has overlooked the negative prefix in the compound, or amended it? Kumārila now takes as his illustration of inference another stock example—'this hill is fiery on account of the possession of smoke'.

'place', the Proposition would admit of the following interpretations²:—

- 40 a. (i) Fire in general is somewhere or other (i. e. connected with space in general).
- (ii) The fire that is seen is wherever it has been seen.
 - 40 b. (iii) Previously experienced fire is connected with place, as such."

Kumārila says of the first two al-Comment. ternatives that they both pretend to prove what is already known.—Pārthasārathi explicitly calls the alternative next mentioned the fourth, and he calls the alternative mentioned last of all the eighth. his introductory comment to the passage he says that the first and second prove the already known, while the last five are contradictory: and his comment makes the fourth the first of the five contradictory ones. There is thus a very pretty confusion as to the number of the alternatives. -a confusion further confounded by the fact that the text (as we have it) speaks of six alternatives in the first sentence of Pārthasārathi's comment. Dr. Jhā renders the first two verses so as to give two alternatives—"(i) The

They are not six, as a corruption in the text suggests: nor seven as Dr. Jhā makes them. The word satsu in Pārthasārathi's comment ad loc.—
stesu satsu prathamadvitīyayoh siddhasādhyatvam, uttaresu paācasu pramānāntaravirodhah—is clearly a mistaken reading, perhaps due to the substitution of satsu for satsu. The context itself might seem to indicate the number seven: for it states that the first and second interpretations take as the thing to be proved something already known, while the hiter five involve contradiction. But later on Pārthasārathi explicitly calls the last the eighth.—The one which I have numbered (ii) really contains two possibilities, one of which—the one numbered (viii).

fire that has been seen in some place or other exists; (ii) the pre-experienced fire exists in space." His third is the one which I number, and which Pārthasārathi calls, the fourth.—The appeal must lie to Kumārila's actual words:—

yo 'gniḥ so 'sti kvacid deśe yo dṛṣṭo yatra tatra vā agniḥ pūrvānubhūto vā deśamātreṇa saṅgataḥ.

It seems to me that the double use of yah and of $v\bar{a}$ indicates three alternatives, and that the yo 'gnih here clearly means fire in general—as it does admittedly in the fourth (Dr. Jhā's third) alternative.

There are *nine* possible alternatives, and it must be presumed that Kumārila had them all in mind:—

```
a. fire as such,
                                             (i) a + a
                                             (ii) a + b
     b. this fire.
                                            (iii) a + c
     c. that fire,

\begin{array}{ccc}
\text{(iv)} & b + a \\
\text{(v)} & b + b
\end{array}

                                                                     Nine possible permu
may be qualified by : --
                                            (vi) b + c
                                                                          tations.
     a. place as such,
                                           (vii) c + a
     b. this place,
                                          (viii) c + b
                                            (ix) c +
     c. that place.
```

Two of these are objectionable under the rubric of $siddhas\bar{a}dhyatva$, as Kumārila says: namely, his first two:—"Fire as such resides in place as such"; and "that fire resided in that place" (a+a and c+c). But there is also a third one which might seem to come under this objection, viz., that this fire resides in this place, b+b. This however Kumārila mentions last of all, as being the natural interpretation of the fourth figure conclusion: and he therefore treats of it in a special argument. It is the eighth of his list. But he probably meant to include it, together with his no. (ii), in the phrase yo drsto yatratatra,—"an experienced fire resides wherever it is extatra,—"an experienced fire resides wherever it is ex-

perienced"; which means both that "that fire resides in that place", and that "this fire resides in this place". He uses a phrase which means both because he does not want to specify here the latter interpretation, which is to be treated later.

But in any case there are only five others mentioned —all objectionable as being contradictory, viz., Nos. (iii) to (vii) in his list. And Kumārila seems only to specify four of these as contradictory, viz., (iv) to (vii), forgetting (iii) although he has mentioned it. One possibility he does not even mention, viz., "fire as such resides in that place", a+c: thus making the total eight instead of nine. How are we to explain these two apparent defects In his treatment?—I cannot offer any explanation why he does not specify as contradictory his no. (iii), "that (past) fire resides in all places", c+a.—The apparent omission of the alternative "fire as such resides in that place" may be explained by supposing the phrase yo 'qnih so 'nena yukto vā to cover both interpretations—"fire resides in that place ", a+c, as well as "fire resides in this place," a+b; both interpretations being rejected as self-contradictory in the single phrase vyāptir anena deścna sarvāgnīnām na yujyate. We shall then have all the nine possible interpretations mentioned.

41 a.

- (iv) "Fire is connected with this place.
- (v) Fire that has been previously experienced is connected with this place.
- 41 b. (vi) This fire is connected with place as such.
 - (vii) This fire is conceted with a former (i. e., previously experienced) place.

42 a.	(viii)	This	fire is	qualified	by	this
	place.					

42 b. The first pair of interpretations take as that which is to be proved something already known, while the later ones involve contradiction".

Comment. Kumārila* says nothing further about the alternatives which involve siddhasādhyatva 'setting out to prove what is already known': he now shows how contradiction is involved in the latter alternatives.

- 43 a. "There cannot be connection of all fires with this place, nor yet of the previously experienced fire, nor can this fire be qualified by all places;
- 44 a. nor again can this fire be qualified by a previously experienced place'.

Comment. This rejects alternatives (iv), (v), (vi) and (vii). No mention is made of alternative (iii).

- 44 b. "As for the alternative that 'this fire is qualified by this place' how can this be asserted?
- 45 a. For fire without reference to place is not called 'this'.
- 45 b. And here it is the place that is cognised before the fire: and
- 46 a. the notion of the 'place' comes into consciousness at the time of the thought of 'this fire', and so cannot be predicated of this.''

Comment.

This disposes of alternative (viii).

The text in this line reads taiiñānakālabuddhaś ca na deśah syād viśesanam. Pārthasārathi glosses thus: tad asau vahnih—jñānakāle 'vabuddhatvān na višesaņam. The point made is that if 'this fire' = fire on this hill, then it will be mere tautology to assert 'the fire on this hill is qualified by residence on this hill': and this is a just criticism.

46 b.

"But since the place—the hill or whatever it may be—has been apprehended without the fire there is no difficulty about having a second ap-

47 a.

prehension of it as qualified by the fire

47 b.

Therefore the probandum is the property-possessor as subject with the property predicated of it:

48 a.

that is to say, in the argument under consideration the probandum is the place-as-qualified-by-the-fire".

Comment.

The conclusion is that we must not take 'fire' (the dharma) as the

xiśesya or subject of the Proposition or Conclusion; and hill' (the dharmin) as the visesana or predicate: in other words, we must not conclude—in the form Bramantip—that fire is qualified by residence this hill. And the principal argument conclusion is the difficulty which is asserted to exist in finding a reasonable meaning in 'sonfe fiery thing is this hill'—or rather for the Indian equivalent of this soleeistic utterance, viz., 'fire is qualified by residence in this kill': No such difficulty is to be found in the normal conclusion 'this hill is fiery'.—But perhaps after all *here are arguments in which the conclusion in Braman-

tip is natural. The argument which concludes to fire on the hill is certainly not one of these naturally fourth figure arguments, the reason being that we are not here starting from the question "In what places is fire to be found?". But suppose a man looking for places in which, say, gold is likely to be found: suppose him to know that places having the characters XYZ have produced gold: and suppose him to perceive these characters in a spot S. Starting from the question "In what places shall I find gold?" his subject or riśesya, i. é. his natural minor term, will be 'places likely to bear gold': and this relatively indeterminate notion will become determinate in the inference through a visesana of predicate, i. e. natural major term, consisting in 'the spot S.' Therefore the natural expression of his movement of thought will be :--

Gold will be found in this place,

For this place has the characters XYZ,

And places having the characters XYZ have to my knowledge borne gold.

S is P,—for P is XYZ, and XYZ is S=BRAMAN-TIP. Or, in the Indian formula: suvarnain taddcśaviśiṣṭam, īdṛśalakṣaṇavattvāt (tasya dcśasya), purvānubhūta-dcśavat—yatra yatra īdṛśalakṣaṇavattvam tatra tatra suvarṇain dṛṣṭam. Exception has been taken to the bracketed insertion tasya dcśasya (see verse 36 b.),—and this is, perhaps, awkward in the Indian formulation. No such difficulty however is felt in the Aristotelian formulation; and it is not a serious objection.

^{&#}x27;Aristotle recognises the Second and Third figures in the Prior Analytics: but not the Fourth, as such. Ross states a reason (W. D. Ross Aristotle, 1923, p. 35): "If his fundamentum divisionis of the figures had been the position of the middle term he would have had to recognise as a fourth possibility the case in which it is predicate of the major premise

Kumārila does not reject the fourth figure form of conclusion' (dharmivisisto dharmah) on grounds on which

and subject of the minor. But his fundamentum divisionis is the width of the middle term in comparison with the extremes, and here there are only three possibilities: it may be wider than one and narrower than the other, wider than either, or narrower than either".—These possibilities, however, only schematise into 'figures' on the assumption that the predicate is always wider than the subject,—an assumption (inaccurate in itself) which at once introduces the differences in position of the 'middle'. Besides, there are four possibilities, even if width is taken as the fundamentum divisionis, viz.:—



(i) M wider than S but narrower than P.

(ii) M wider than either.

(iii) M narrower than either, and



(iv) M narrower than S but wider than P.

The last will be the rubric of the argument "this place has the characters XYZ, and places having the characters XYZ are gold-bearing places, therefore one gold-bearing place is this place" = P is M, M is S, therefore S is P.

The fourth figure is not the first figure read backwards. There is a real difference symbolised by the exchange of S and P in the diagrams for Figs. I and IV. This difference may be expressed by saying that while Fig. I determines the attributes of a subject, Fig. IV determines the subject of an attribute. In the Fig. I the subject (Charmin) is the logical subject. But in Fig. IV the quality (dharma) is the logical subject, S, or risesym.

Of course these circles misrepresent thought-processes: and the Indian phraseology of dharmavisisto dharma and dhamivisisto dharmal is more suggestive of the real problem of syllogistic figure, which has little or nothing to do with the extension of the terms or the position of the middle. The important question is whether it is possible to predicate the dharmin of the dharma.

it might reasonably be rejected. It is not clear that no reasonable interpretation can be found for the statement that 'fire is qualified by (residence) in this place'.

SECTION 8. KUMARILA'S REFERENCE TO UDDYOTAKARA'S VIEW OF THE ANUMEYA

(Slokavārtika, anumānapariccheda, verses, 48—50)
48a—51a . . . Dhūmasyānyaiś 'ca kalpitā
Nanu šabdavad eva syāl lingagamyam višeṣaṇam :
Naivām, na hy atra lingasya šaktyanekatvakalpanā,
Na ca tasyānumeyatvam, višeṣyaś cāvadhāritaḥ,
Višiṣṭatvena cājnānāt tanmātrasyānumeyatā.
Nanu dhūmavišeṣyatve hetoḥ pakṣajkadeśatā.
Naitad asti, višeṣe hi sādhye sāmānyahetutā.

^{&#}x27;If it is possible to predicate the dharmin of the dharma, then a 'fourth figure' conclusion would seem to be possible. Perhaps the general question of its possibility or justification cannot profitably be discussed without a prior examination of the concept of the metaphysical dharmin, and of its relation to the logical subject or višesya,—an examination which I have not met with, or have failed to recognise as such, in Indian logical works.

But this much perhaps may be said, that Kumārila's rejection of the 'fourth figure' conclusion is not well-grounded. For the natural interpretation of a conclusion which predicates dharmin of dharma would be Kumārila's No. iv (see p. 295 supra) "fire as such is qualified by this place" (a+b, in the scheme on p. 294 supra). Kumārila summarily rejects this as self-contradictory: but only because he begs the question by understanding "fire as such" to mean "all particular cases of fire." But to particularise fire in this way is already to assign to it its dharmin or adhikarana: and this has not yet been done (if those who support the 'fourth figure' are right) until the predicate, the dharmin, has been added to the as yet unparticularised logical subject, the dharma, in such propositions. Before its adhikarana is assigned it is neither this nor that nor all particular fires; but fire in general, without a local habitation. There is then no self-contradiction.

48 a. "And others think that smoke is the probandum"

Comment. Pārthasārathi Miśra says: Naiyāyikās tu dhāmam eva dharmīkṛtya
tasyaivāgniviśiṣṭasyā 'numeyatām āhuḥ. ''The Naiyāyikas make 'smoke 'itself into the property-possessor or
subject, and say that it is smoke-as-qualified-by-fire that
is the thing to be proved''. This is the position which
Uddyotakara maintains in the passage translated above.

"The objection that the middle 48 b. term proves the quality (P, fire) in just the sense in which a word, in addition to its function of denoting an individual, has the function of connoting its class-character, is mistaken: for there is no question of the middle term's having a 49 a. double function similar 49 b. double function of the word. viśesana, P (fire) is not the probandum' (and therefore the middle term cannot have the function of indicating this, since its business must be to indicate the probandum): and the subject or viścsya, S (the hill) is already known (and therefore cannot be the probandum,—so that the middle term cannot have the function of indicating 'S' either).

And, as there is non-apprehension only in respect of qualifiedness, it is this alone that is the thing to be proved (and therefore this alone that M indicates—so that there is not any question of a double function of M).

50 b. It might be objected that if the middle term, M (smoke), is taken to be the subject¹,

¹nanu dhūmavisesyatve hetoh pakṣaikadesatā. The enatural meaning of the sentence would be 'the hetu is an aspect, i.e. a part in intension of the

- 51 a. the middle will be one of the things of which P is to be proved.—
 But this is not so: for M in its common nature is the probans, while a specific case of M is the probandum.
- —The first objection brought against the supposed^{*} Naiyāyika attempt to dispense with S in the syllogism is in the form of an analogy from the double connotativedenotative function of words. If the word 'cow' can denote individual cows and connote 'cow-nature', it means that the prameya, or object of śābdabodha (i. e. of the knowledge which comes through understanding the meaning of words) has a sort of doubleness. In the same way the *prameya* of inferential knowledge—the anumeya or probandum—may be expected to show a certain doubleness: that is to say the *linga* or middle term (which is to inferential knowledge what the word is to verbal knowledge,—namely, its instrument) may have a double function corresponding to the double connotativedenotative function of the word: it may (so to speak) have S as its probandum in denotation, and P as its pro-In other words the M of the bandum in connotation. inference carries with it reference to an S as well as reference to a P. The Naiyāyika reply is that the probans has a single function—that of proving that *P* qualifies:something. There is nothing to show that this 'something' is a 'subject', S, which can have an independent status apart from M. On the contrary, S is no more than M in its proper context.

pakṣa'. This would however be a fair description of the hetu on any view: and so it could hardly be an objection against the Naiyāyika view: and the answer in fact asserts that M in general is an aspect of the M-in-particular which constitutes the pakṣa or probandum on the Naiyāyika view.—The meaning of hetoh pakṣaikadeśatā must then be 'the hetu would form in extension a part of the minor term'. If M is, in extension, part of the Mp's, the M's about which P is to be proved, it will not help us to prove P.

The criticism appears to be based on a misunderstanding of Uddyota (kara's teaching.

On this view the syllogism would run:-

1. The individual SM is P,

2. because M;

- 3. ,as other cases (XM) have been found to be M and P,
 - 4. so is this SMP, M and P.
 - 5. Therefore this SM is P.

It will be seen that this cannot be formulated as a normal 'syllogism': because there is no separable minor term or minor premise: and because there is no major premise. The second member does not state paksacharmatā ('S is M'), because there is no need to state it—we are dealing with ah M already in the very form of our first member or Proposition: and so there is no (separable) minor term of which M is to be stated. The second memberis therefore left with the function of emphasising the pro bativeness of being M (through an ablative-inflection, translated by 'because'): as Vātsyāyana puts it (NBh p. 41 l. 2) sādhanatāvacanam hetuh.—And the third member does not embody (as it does in Praśastapāda's formulation) the major premise 'all M is P', but is in fact what it is in name,—an illustration or exemplification of the probans-probandum relation.—The fourth member 'applies' the illustration, in the form of what Uddyotakara calls the *lingaparāmarśa*: the realisation that in SM M is connected with P.—If we insist on putting these arguments into syllogistic form, it will be found that the positive form fails to 'distribute the middle', while the negative form involves an 'illicit process of the major'. But to attempt to reduce them to the 'forms of syllogism' is to misunderstand Uddyotakara's teaching.—Praśastapāda's and Kumārila's arguments can be treated as if they were Aristotelian syllogisms: but not Vātsyāyana's and Uddayotakara's. And this part at any rate of the Nyāyavārtika amounts to a protest against the principlesupon which 'syllogistic' is based.

CHAPTER V

MEANS OF KNOWLEDGE OTHER THAN PERCEPTION AND INFERENCE

Means of knowledge other than perception and inference.—(i) Words.—
(ii) Gestures.—(iii) "Analogy".—(iv) Presumption or Implication.—(v):
"Inclusion."—(vi) Absence or non-apprehension.—(vii) Tradition.

Introductory

The various independent sources of valid cognition recognised by the different schools are stated by Varada Rāja in the $T\bar{a}rkikaraks\bar{a}^{\dagger}$. The $C\bar{a}rv\bar{a}k\bar{a}s$ recognised perception alone: the Bauddhas and Vaisesikas recognise perception and inference: the $S\bar{a}mkhyas$ recognise Verbal Testimony besides perception and inference, and one school of $Ny\bar{a}ya$ agrees with them in recognising only these three: other schools of $Ny\bar{a}ya$ add Comparison as a fourth source of knowledge: Prabhākara, the $P\bar{u}rva$ $M\bar{v}m\bar{a}ms\bar{a}$ teacher, recognises these four together with Presumption or Implication as a fifth: the followers of Kumārila Bhatta, the founder of the other $M\bar{v}m\bar{a}ms\bar{a}ska$ school, add non-existence as a sixth to these: the $Paur\bar{a}nikas$ add Inclusion and Tradition.

That this doctrine of the different sources of knowledge (pramāṇa) dates far back in the history of Indian logic is clear from the fact that the Nyāya-sūtra (II.ii. l.ff.) devotes a section to refuting the opinion that tradi-

[•] Reprint from the Pandit (Benarcs 1903) pt. 56—Pratyaksam ekam Cārvākāḥ, Kanādasaugatan punaḥ Anumānam ca; tac cātha Sāmkhyāḥ śabdam ca te api; Nyāyaikadeśino 'py evam, upamānam ca kecana. Arthāpattuā sahaitāni catvāry āha Prabhākarah, Abhāraṣaṣṭḥāny etāni Bhāṭ-tā •Vedāntinas tathā. Sambharaitihyayuktāni tāni Paurāṇikā jaguḥ.

The school of Nyāya which accepted only three proofs are named in the comment ad. loc., 'Bhūsanīya'; which no doubt means followers of the well-known comment Bhūsana on the Nyāyasāra of Bhūsarvajūa. The Nyāyasāra, among other unusual features, taught three pramūnas instead of four. See Vidvābhūsana HIL p. 358; Keith ILA p. 30.

tion, implication, inclusion and absence are separate means of proof, and that therefore there are more 'proofs' than the set of four (pramāṇacatuṣṭva) which it has itself recognised in the first book. Implication is again referred to in the fifth book of the Sūtra, which discusses a sophism of "apparent implication" (arthāpattisama). Unless therefore we are prepared to maintain that the second and fifth books are later additions to the śāstra, we must recognise that the Nyāyasūtra presupposes the existence, not only of the Vaiśeṣika, but also of other bodies of philosophical doctrine in which logical topics had been discussed.

Prasastapāda deals briefly with the other six supposed means of knowledge (over and above the two which he himself accepts—perception and inference), adding to the list a seventh, gesture. It will be convenient to translate his remarks under each of these seven heads as a text for further observations. Two points will be found to emerge in the present chapter. The first is that the Indian notion of pramāna as source or instrument of valid apprehension is somewhat indefinite and covers more than is signified by the English word 'proof', as is clear from the heterogeneous character of the processes which have laid claim to the status of pramāna. even the Vaiścsika school, which rejects the claim in all cases except those of perception and inference, does not achieve a specifically logical conception of pramāna. The second point is that certain of the processes which claim to be separate from anumāna, are in fact distinct from anumāna, i.e. from syllogistic or paradeigmatic inference, but are nevertheless inferential processes: that, while the Vaisesika is mistaken in attempting to reduce them to the specific sort of inference called by the name of anumāna, his opponents are no less mistaken in feiling to realise that they are still kinds of inference although distinct from anumāna.

(i) Word, or Testimony (Sabda)

PBh p. 213 l.12. "Words and the rest are also included in inference, because they have the same principle $(sam\bar{a}navidhitv\bar{a}t)^{1}$. As inference comes about in the case of an object not present to sense, on the part of a person who has apprehended the inseparable connection (between 'M' and 'P'), through remembrance of this connection and through unquestionable experience of the Mark, so also it arises in the same way from words, etc. And authoritative statement also in the form of veda and other scriptures (śrutismṛtilakṣaṇo 'py āmnāyah) depends on the credibility (prāmānya) of the author; as is said in Vaisesika-sūtra I.i.3 'tadvacanād āmnāyaprāmānyam' 'scripture is authoritative because it is the word of God'. And that scripture is not eternal, but has an Author, can be inferred from reasons which are stated in Vaišeṣika-sūtra VI.i.1 'buddhipurvā vākyākrtir vede' "sentence-structure in the Veda presupposes an intelligence'; and again in VI.i.3 'buddhi-pūrvo dadātiḥ' ''words such as 'gives' presuppose an intelligence".

The argument in the second half of this passage is directed against the $M\bar{\imath}m\bar{a}msaka$ view that the Veda has no author, being eternal. The answer is that when in ordinary life we find sentences and words we infer that the words and their arrangement in sentences have their origin in some intelligent being who uses the words and sentences. Scripture is composed of just such words and sentences, and therefore must have an author. And the validity of its statements and injunctions will be inferred from the credibility of that author.

^{&#}x27;Cf. the use of vidhi above PBh. p. 205. Srīdhara glosses samānavidhit'vāt here by samānapravṛtiprakāratvāt "because the form or character of the process is the same"; and he explains this by saying "yathā vuāptigrahaṇabalenānumānani pravartate, lathā šabdādayo 'pi"—"just as inference functions through the force of the apprehension of inseparable connection, so also
do testimony, etc."

The first half of the passage deals with the general problem of the nature of the knowledge derived from words. We should distinguish two questions here; but they are not always kept separate in Indian discussions on the subject—(1) what is the process by which we understand the meaning of words? and (2) how do we know that these meanings, when understood, correspond to realities? It is the latter question that is intended to be answered by the Vaisesika when he says that knowledge derived from words is inferential. Šrīdhara's formulation of the proof that knowledge derived from words is inferential is: śabdo 'numānam vyāptibalenārthapratipādakatvād, dhūmavat—" word is an instrument of inferential knowledge, because it gives knowledge of things by force of a universal connection: just as smoke [gives knowledge of fire by force of the universal connection between smoke and fire]''. In the course of Sridhara's discussion it soon becomes apparent that the relation between word and thing (the relation of denoting and denoted) is something quite different from the relations of conjunction, inherence, etc., on which inferences such as that from smoke to fire are grounded. It also becomes clear that the relation as such is not an inseparable one, because different words mean the same thing in different languages, and even in the language of the Aryas the same word in different districts means different things. Besides, statements are not always true. It is therefore impossible to maintain that there is a natural relation (svābhāvika-sambandha) between word and thing: the relation depends on convention (samketa). And further the truth of a statement depends on the speaker, who may

 $^{^1\}mathrm{Sr\bar{I}dhara}$ has a long polemical passage on this, NK pp. 214—217. It is translated by Faddegon pp. 465—469. See also NK 217—220, translated by Faddegon pp. 470—474.

Kumārila (Sl. Vārt., Sabda, 15—37) gives the Sānkhya arguments against the Bauddha and Vaišesika view, and admits that these arguments are invalid; though he subsequently rejects the view that Verbal knowledge is inference, from the standpoint of his own theory.

or may not be reliable $(\bar{a}pta)$. Thus when we say that the word is an inferential mark which gives knowledge of things through the force of a $vy\bar{a}pti$ or universal connection, we must be understood to mean (a) that the connection depends on human convention, and (b) that word is an inferential mark from which the thing can be known only when it is $spoken\ by\ a\ reliable\ person$. But after all even such an inferential mark as smoke (used in inferring that the hill is on fire) is a valid mark only with certain qualifications, e.g. if the smoke is rising upwards in an unbroken connection with the ground, etc. The adding of qualifications to the 'Mark' does not prevent the case from being a case of inference.

With this view may be compared Dinnāga's teaching in the *Pramāṇasamuccaya*, as reported by Vidyābhūṣaṇa¹. "Dinnāga asks: 'What is the significance of Credible Word? Does it mean that the person who spoke the word is credible, or that the fact he averred is credible?' 'If the person', continues he, 'is credible, it is a mere inference'. On the other hand if the fact is credible, it is a mere Perception.''². The nature of the inference, on the former alternative, is made plain in the citation from Dinnāga given by Vācaspati³.

āptavākyāvisamvādasāmānyād anumānatā,--

"We infer that the reliable person's words agree with reality, from that common property of agreement with reality which belongs to all statements by reliable persons." That is, we have learned from experience the general rule that trustworthy persons' statements are true: and we apply this rule to the case of this particular statement. The process is therefore inference.

¹HIL p. 288.

²Vidyābhūsaņa's words here are in fact a transfation of the objection which Uddyotakara raises NV p. 63 ll. 13—16, and which Vācaspati ributes to Dinnāga, NVT p. 138 l. 6.

^{*}NVT p. 138 1. 20.

As to the second horn of Dinnāga's dilemma,—in the alternative we may learn by actual experience that the speaker's statement is avisamvādin, i.e. in agreement with reality. And in this case the pramāna, or means by which the idea conveyed by the words is justified, is perception.

Uddyotakara replies that Dinnaga's criticism is irrelevant, because he has not understood the meaning of Nyāya Sūtra I.i.7—āptopadeśah sabdah: which, according to Uddyotakara, means sabdollekhena pratipattih, cognition by verbal indication. Uddyotakara's attitude apparently is that words do lead to belief—and if they are the words of a reliable person, to right belief. they are (in the latter case) pramākaraņa—the instrument of true cognition: and pramākarana is pramāna. Din-. nāga however looks for another pramāņa which will provide a justification or proof of the belief produced by the This justification Dinnaga finds either in inference or perception. His refusal to admit that śabda is a pramana should be due to his understanding the word pramāna in a different sense from that in which the Naiyāyika understands it. And yet the Bauddha, as well as the Naiyāyika, holds the doctrine of paratah prāmānyam¹, i.e. that no pramāna carries its own justification with it: its validity being established from some other source. The Naiyāyika however used this doctrine principally against the Mīmānişaka tenet that the validity of Testimony was self-proved2. In view of the fact that the Bauddha held the doctrine of paratah prāmānya, it is difficult to understand his refusal to admit that, since sabda does, as a matter of fact, sometimes give rise to beliefs which happen to be true, it is a pramāna.

¹SDS, chapter on Jaiminīya-daršana (p. 196 in Cowell and Gough's translation). See Jhā, Sadho Lal lectures on Nyūya, page 37.

²Jha, Satho Lal lectures, pp. 37-38.

For, after all, he does use pramāṇa in the sense in which the Naiyāyika uses it. And, in that sense, śabda is a separate pramāṇa.

The discussion about śabda is perplexing because we feel that the disputants are so often at cross purposes. And the reason why they are at cross purposes is that the distinction between a psychological cause of knowledge (pramā-karaṇa) and a logical ground of knowledge (pramāṇa in the sense of proof) was not clearly drawn. Sabda is clearly a psychological cause of knowledge. But, equally clearly it is not a logical ground of knowledge; except for those, who, like the Mīmāmsakas, were prepared to maintain its 'svataḥ prāmānya' or logical self-The Naiyāyika was not prepared to do this. sufficiency. But he called śabda a pramāna in the psychological sense. The Bauddha refused to call it a pramāna because (quite inconsistently) he was, for the moment, understanding pramāņa in the logical sense of self-sufficient ground of belief: a sense really inconsistent with his doctrine of paratah prāmānya.

(ii) Gesture

PBh p.220, 1.9. "Since we find that cognition is produced by the gesture of a person whose expressive actions are known to us, this too is nothing but inference."

That is, it is not the gesture as such that produces the knowledge, but our knowledge of what the person means by his gestures. The knowledge conveyed by the gesture therefore depends on the connection between the gesture and the speaker's intention. This is a vyāpti, and the cognition is therefore inference as being vyāptibalena.

Here again we feel that distinctions require to be lrawn. (1) Gestures are psychologically a cause of cognition: whether the process by which the cognition is

produced from the gesture is or is not an inferential process is a question for the psychologist.

- (2) The cognition which is thus produced is frequently a de facto correct cognition. Gesture could in that sense be called pramākaraņa, and therefore pramāna.
- (3) But if we ask the strictly logical question,—whether the gesture brings with it any justification for believing the dc facto right cognition to be dc jure right,—then we shall perhaps have to reply that this justification would depend on an inference of credibility.

It is not clear whether Prasastapāda is answering the psychological question (1) above, or the logical question (3) above, when he says that gesture, as a supposed pramāṇa, is really inference. And the reason why it is not clear is because he is thinking of pramāṇa in the ambiguous sense noted under (2) above,—i.e. as pramākaraṇa: which may mean either a de facto cause of correctness, or a de jure ground of correctness in the cognition.

(iii) Comparison or Analogy (upamāna)

The classical account of this process is as follows. A townsman is told by a forester that a bison (gavaya, bos garacus) is like a cow—'yathā gauḥ, tathā gavayaḥ'. He goes into a forest, sees a creature resembling a cow, and realises that this is the creature called a 'bison'. The outcome of the process (upamānaphala, upamiti) is the cognition of the name as applying to the thing. The instrument of this cognition (upamāna) according to Vātsyāyana is the knowledge expressed in the formula 'yathā gauḥ, tathā gavayaḥ'', 'a bison is like a cow': "but

This suggests the formula of the fourth member of the syllogismthe upanaya or Application. And it is noteworthy that Vātsyāyana, in the passage on NS I. i. 39 in which he characterises the members (avayava) of

according to later, opinion it is the perceived resemblance of the creature now present to a cow, assisted by the memory of the information previously received that a bison is like a cow¹.

But is this really what the sūtrakāra means by his definition of upamāna,—'prasiddhasādharmyāt sūdhyasādhanam upamānam'.'

The primâ facie meaning of this is: "comparison is the establishing of what is to be established from a known resemblance (or: from resemblance to a thing known)". Now this is a description which would be appropriate to the inferential process known to western logic as Analogy. But the difficulty about interpreting the sūtra in this way is obvious. Inference, anumāna, as set out in the account of the five-membered syllogism, is also a process of 'proving the probandum from likeness to a known thing in it is described as an analogical process. There would thus be no distinction available between anumāna and upamāna.

And there is no corroborative evidence at all for the existence anywhere in Indian logic of the western notion of analogy, as a specific type of inference distinct from anumāna,—

x is like y.

But y has the property P.

Therefore x has the property P.

the syllogism, says explicitly that the application is analogy-upamānam upanayah, tathety upasanharāt; the application is analogy because it applies (what has been said before in the example) by the use of the word 'tathā' so'. Cf. NS II, i. 48.

Jha, translation, I. 196-197, footnote.

²NS I. i. 6. See also NS II. i. 41-48 (the rather obscure passage in which upamāna is examined) translated pp. 318-319 infra.

[•] See infra p. 318 for the meaning of prasiddh 1-sādharmya.

^a Thus in NS I. i. 34 we get what seems practically an identical formula given as the definition of the 'Reason' or heth in a syllogism:—udāharaṇasādharmyat sādhyasādhanana hethah,—'the Reason is the proving of what is to be proved from likeness to an example'.

The passage in the Nyāyasūtra in which upamāna is examined (II.i.44-48), whatever its exact interpretation may be, certainly has no reference to analogy in this western sense of the term. And the only other ancient authority for the meaning of upamāna,—namely, the 'Vrttikāra' cited in Sabara's Bhāsya on Mīmāmsā Sūtra I.i.51, gives an account still further from our conception of analogical proof. The Vrttikāra's definition runs: upamānam apy asamnikrste 'rthe buddhim utpādayati, yathā gavayadarsanam gosmaranasya—'' comparison also (i.e. like inference) gives rise to a cognition in an object not in contact with sense: for instance, the sight of the bison gives rise to remembrance of the cow ". This is explained to mean that upamāna makes us apprehend the similarity of the object which is present (the bison) to an object which is not present (the cow) but is called up by memory.

For Vātsyāyana, upamāna, as instrument of cognition, meant a knowledge of resemblance, in the form 'a bison is like a cow'. The question is, as Vātsyāyana puts it, kini punar atropamānena kriyate?—' what is it that is effected by this knowledge of resemblance as an instrument'? In other words what is the upamiti or upamānaphala, the special kind of right cognition (pramā) produced by this special pramāna, i.e. a cognition of resemblance?

The only answer that Vātsyāyana could find to this question was that the cognition of resemblance led to apprehension of the relation between designation and thing designated (samijāsamijāisambandha). This seems a rather trivial result for a separate pramāna to produce: and that is why the Indian account of upamiti, cognition arising from resemblance, strikes a Western reader as a singularly barren notion. But Vātsyāyana's examples show that the knowledge of the name carried a good deal.

¹Bibl. Ind. edn. p. 10 l. 16.

more with it. Knowing that the herb called the 'bean-leaf' is like a bean, a person finds a herb like a bean, realises that this is the thing to which the name bean-leaf applies, and plucks it for medicinal purposes (bhaiṣajyā-yāharati). The recognition of the object as possessing certain properties is the important thing—not a mere knowledge of names. So understood, upamiti is a resultant of importance; and the kind of indirect identification of hitherto unseen objects designated as upamāna does play no small part in the growth of knowledge. Thus explained upamāna may be described as a process of 'apperception'.

For reasons which have already been partly indicated and which are further explained below in the comment on Nyāya Sūtra II.i.44—48 (upamānaparīksā) I think Vātsyāvana's interpretation of *upamāna* gives what was substantially the meaning of the sūtrakāra. The wording of the definition of upamāna in I.i.6 is misleading, more especially in view of its close resemblance to the wording of the definition of the 'reason' (hetu, second member of the syllogism) in I.i.34: for when we are told that "upamāna is the establishing of what is to be established from likeness to something known ", and then told that "the reason is the establishing of what is to be established from likeness to the example", we naturally think that the two processes must be closely allied. But the fact is that sādhyasādhona, 'establishing what is to be established', is a phrase which allows of different interpretations: and its meaning is determined by the context. In speaking of the hetu it can fairly be translated 'proving the probandum'. But in speaking of upamāna it has a different sense—a sense correctly given in Vātsvāyana's paraphrase prajnāpanīyasya prajnāpanam. sūtra I.i.6 means that "upamāna is the making known of what has to be made known, from likeness to a known thing ".

Praśastapāda says:—

PBh p.220 1.16 "Knowledge of likeness as an instrument of valid cognition is nothing but credible testimony (upamānam āptavacanam eva), because it is the conveying of the (idea of the) bison, through the (idea of the) cow, to a person to whom the bison is unknown, by a person who has seen a bison".

Praśastapāda has already reduced Testimony to Inference: so that in reducing upumāna to Testimony he is, from his own standpoint, reducing it to Inference. The view which he is criticising is perhaps Vātsyāyana's: for it is Vātsyāyana who identifies the instrument of upamiti with the knowledge 'yathā gauh, tathā gavayah'; ignoring the perception of the gavaya which later commentators make an integral part of the upamāna as the instrument of upamiti. And, as against this (clearly inadequate) view, Praśastapāda uses an argumentum ad hominem: "You identify upamāna with knowledge in the form 'the bison is like the cow'. But this knowledge can only have been derived from testimony. So that upamāna is, from your own standpoint, āptavacana, and not a separate instrument of cognition'.

This may be effective as against Vātsyāyana, but is incomplete as a criticism in face of a more adequate analysis of the intellectual process which Vātsyāyana has in view. That process certainly depends partly on testimony: but it is something *more* than a belief based on testimony—and it is in virtue of this something more

The text has aprasiddhasya gavayasya, but there is a variant aprasiddhāvayarasya. It is necessary to emend to aprasiddhagavayasya: and that this is the right reading is confirmed by the commentary which in line 21 has aprasiddhāgavayasya, and glosses it by ajūātagavayasya. Sectified and the section of the

 $^{^2\}bar{a}ptena=by$ a fit, i.e. credible person. But later commentators and always explain it in this connection, as one who has had $\bar{a}pti$, i.e. $saks\bar{a}d$ arthasya $pr\bar{a}ptih$.

that the name *upamāna* is used of it. Srīdhara accordingly supplements Praśastapāda's brief criticism'.

Dinnāga in the Pramāṇasamuccaya argued that upamāna is not different from either (on one interpretation of it) perception, or (on another interpretation of it) testimony²,—na pratyakṣād vākyād vā vyatiricyate³ "When one apprehends both the cow and the bison by perception, then one gets the knowledge that this is like that' from perception. When again one hears that 'the bison is like the cow', then it is merely on hearing this that one understands that some of the qualities of the cow are present in the bison and some are absent—since otherwise the phrase 'like' (yathā. . .tathā) would not have been used. It is a preponderant sameness of qualities (bhūyas sārūpyam) that one apprehends ".

Both Uddyotakara and Vācaspati reply that Dinnāga's criticism is irrelevant because he has not understood what the sūtra means by upamāna—i.e. he has not taken Vātsyāyana's view of the sūtra as meaning by upamāna the process of applying a name to a thing through similarity to a known thing; but has interpreted it as merely the process of getting to know the similarity of two things. And this seems a fair criticism of Dinnāga.

¹NK pp. 220—222. In criticising the view of the "disciples of Sabara Svāmin", i.e. the view above referred to in connection with the definition of upamāna given by Sabara, he quotes Kūmarila, Slokarārtika, upamāna, 35. Faddegon translates this passage of NK at pp. 475—478. For the Mīmāṅsaka account of upamāna, see Jhā's Prābhākara School of Pūrva Mīmāṅsa pp. 68-69—referred to by Faddegon loc. cit.

Pūrva Mīmānsā pp. 68-69—referred to by Faddegon loc. cit.

2NV p. 60. l. 16 ff., with NVT p. 135 ll. 3—19. For Dinnāga testimony is of course not a separate prumāna. What he says amounts to this, that upamāna is reducible either to perception or inference.

this, that upamāna is reducible either to perception or inference.

NVT p. 135 l. 14. It is part of a śloka from Dūniāga.

NV p. 61 l. 3 aparijūāya sūtrārtham. NVT p. 135 l. 3 tad īdršam upamānaphalam (videlicet, samjūūsamjūisambandha) avidvān sādršyajūānam sādršyavišistajūānam vopamānam iti bhrānto Bhadanto Diūnāga āksipati.

Kādršyajūāna is the knowledge derived from testimony, sadršyavišistajūāna is the knowledge derived from testimony, sadršyavišistajūāna is the knowledge derived from testimony, sadršyavišistajūāna is the knowledge derived from testimony. Sadršyavišistajūāna is the knowledge derived from testimony. Sadršyavišistajūāna is the knowledge derived from perception:—the former—yathā gauli tathā javaya iti; the latter=gosādršyavišisto yam ūdršah pindah. See NVT p. 138 ll. 5-6).

Vācaspati argues that, understood as Vātsyāyana understands it, upamāna must be regarded as a pramāṇa distinct from perception, etc., on the ground that it produces a kind of right cognition (pramā) distinct from those produced by the other pramāṇa's—pratyakṣādibhyaḥ pramāṇāntaram upamānam tajjanyapramāvilakṣaṇapramājanakatvāt.

Note on the examination of the notion of vpamāna in Nyāya Sūtra II. i. 44—48

Sūtras 44-45. A dialectical objection is raised. Similarity must either be complete, preponderant, or slight. If complete, there is not resemblance—no one says 'a cow is like a cow'. Nor again is resemblance asserted on the basis of preponderant similarity—no one says 'an ox is like a buffalo'. Nor again on the ground of slight similarity—otherwise everything would be like everything.

This is set aside on the ground that analogy proceeds from a *prasiddhasādharmya*. There is no question of all, most, or little—there is resemblance: and where there is resemblance analogy cannot be denied.

Sūtras 44-47. Pratyakṣeṇāpratyakṣasiddheḥ (46) Nāpratyakṣe gavaye pramāṇārtham upamānasya paśyā ma iti (47).

According to the commentators, $s\bar{u}tra$ 46 argues that $upam\bar{u}na$ is really $anum\bar{u}na$, inference, because (like inference) it proves by means of something perceived something which is not perceived. $S\bar{u}tra$ 47 replies that $upam\bar{u}na$ does not prove something unperceived,—"we do not see $upam\bar{u}na$ functioning as a $pram\bar{u}na$ in the case of the bison as something unperceived". We apprehend by $upam\bar{u}na$ that a bison present to sense is a bison. Whereas we infer the existence of fire which is not

present to sense. Thereby upamāna is different from anumāna.

The passage seems to show that Vātsyāyana's account of $upam\bar{a}na$ is that intended by the $S\bar{u}trak\bar{a}ra$, and stands for the genuine tradition of the ancient school of $Ny\bar{a}ya$.

Sūtra 48. Tathety upasamhārād upamānasiddher nāvišeṣaḥ.

"The process of *upamāna* is established by the use of 'so' or 'like' (in the 'application' or fourth member of the syllogism): and therefore it is not true that it is pot different from *anumāna*."

The present $s\bar{u}tra$ suggests that the motive for the recognition of $upam\bar{a}na$ as an independent source of knowledge was to provide a $pram\bar{a}na$ corresponding to the fourth 'member' in the way in which 'testimony' corresponds to the first, 'inference' to the second and 'perception' to the third. $Cf.\ NBh.\ p.\ 44$, ll. 11—15, on $NS.\ I.i.39$.

(iv) Presumption or Implication (arthāpatti)

According to the classical account of this process it consists in finding a supposition which reconciles a prima facie contradiction. The two stock examples are: (1) You have information that Caitra is alive: but you do not find him in his house. Ergo, he is out. (2) You are told of one Devadatta who is fat and does not eat by day. You draw out of this statement the implication that he eats by night. The former is given as an illustration of drstārthāpatti, implication or presumption from experienced facts; the latter as an illustration of srutārthāpatti, implication or presumption from words.

^{**}NK p. 222 l. 9 ff. and ll. 25—27. The passages in the NK in which arthapatti is discussed extend up to p. 225, and are translated by addegon pp. 478—483.

Arthāpatti was recognized as a separate means of valid cognition (pramāṇa) by both schools of $P\bar{u}r_{c}a$ $M\bar{\imath}m\bar{a}ns\bar{a}$ $(Bh\bar{a}ttas)$ and $Pr\bar{a}bh\bar{a}karas$, and the doctrine is found with its essential features developed as early as the $Vrttik\bar{a}ra$ cited by Sabara. The passage in Sabara's $Bh\bar{a}sya$ may be quoted as the locus classicus.

Sabara

"arthāpattir api dṛṣṭaḥ śruto vārtho 'nyathā nopapadyata ity arthākalpanā: yathā, jīvato Devadattasya arhābhāvadarśanena bahirbhāvasyādṛṣṭasya kalpanā." "Presumption is the supposition of a thing on the ground that a thing, heard or seen, is otherwise not possible: for instance, through finding that Devadatta, though alive, is not at home (there arises) the supposition of his beingout—a thing which we do not know by actual experience."

Nyāya-sūtra and Vātsyā'yana

This however was not the only account of 'presumption' current in the early schools; and it was not the original meaning of the term. The notion is discussed in that passage of the $Ny\bar{a}ya-s\bar{u}tra^3$ which argues

Jhā, PSPM pp. 70-71. See also Slokavārtika, section 'arthā patti'.

²Bibl. Ind. edņ. p. 10 ll. 17—20.

³The section known as pramāṇacatustvaryavasthāpanā, NS 11. ii. 1—12. Arthāpatti is spoken of in $s\bar{u}tras$ 1—6.

It is worth noting that arthāpatti is one of the 32 tantrayukti's or methodological notions used in a kāstra of which Sukruta, Caraka and Kantilya give lists with definitions and examples. The definition of arthapatti given by Kautilya (with which Sukruta's definition agrees) is: "nad unuktam arthād āpadyate": and the example from the kāstra is that, when we are told that a person skilled in the ways of the world should approach a king by way of good advice which pleases, the implication (arthād āpansam bhavati) is that he should not give good advice that does not please. This corresponds to Yātsyayana's account, not to Sabara's.

Kaut. Arth. S. adhikarana 15, adhyāya i.-p. 424 of Mysere edn. 1909.

against the separate status of supposed $pram\bar{a}na's$ other than the four enumerated in NS I.i. 3; and the account there given, as interpreted by Vātsyāyana, is not identical with the account given by Sabara.

Vātsyāyana begins by defining arthāpatti as abhid-hīyamānc 'rthe yo 'nyo 'rthaḥ prasajyate—' another thing which follows as an implication of the thing that is stated"". The example which he gives is: yathā megheşv asatşu viştir na bhavatīti kim atra prasajyate? satsu bhavatīti—" for instance, what is implied in the statement that when there are no clouds it does not rain? (The implication is) that it rains where there are clouds2", i.e. the object cognised through implication is that the production of the effect, rain, is limited to the existence of the cause, clouds—"kāryotpādaļ kāraņ asattām na vyabhicarati". If not A, not B: ergo, if B, then A. Vātsyāyana further characterises this process as 'apprehending from opposition what is not stated' —anabhihitasyārtliasya pratyanīkabhāvād grahaṇam ' (NBh.) p. 101 1.6 on NS II.ii.2). He says shortly afterwards: " from the statement that in the absence of the cause the effect is not produced, we arrive by implication at what is related to this as its opposite, namely, that the effect is produced in the presence of the cause³. For from a negative comes the opposed affirmative".

¹NBh on NS II. ii. 1, p. 100 l. 11. This looks like a paraphrase of the tantrayukti cited in the preceding footnote. That Vātsyāyana was familiar with these lists of tantrayukti's is clear from NBh p. 16 l. 9 on NS I. i. 4. As the śłoka quoted by him in NBh p. 7. l. 5 on NS I. i. 1 occurs in the Kautilīya Artha-sāstra it is even possible that he knew theist as Kautilya gives it. Cf. also NS V. i. 21 (arthāpattisama).

An opponent objects that it does not always rain when there are louds, so that the conclusion arrived at by implication is uncertain (onai-tantika).—The answer given is that he misunderstands the result given by implication,—the implication of 'when there are no clouds it' does not rain' when it does rain there are clouds.

NBh p. 101 l. 16 on NS II. ii. 4: asati kārane kāryam notvadyata iti vākyāt pratyanīkabhūto 'rthah sati kārane kāryam utpadyata ity athād āpadyate. Abhāvasyahi vākyād bhāvah pratyanīka iti.

It will be clear that Vātsyāyana means little more by arthāpatti than what Western formalists call the opposition of propositions and immediate inference. But Vātsyāyana has no doctrine of 'logical opposition' such as that embodied in our 'Square of Opposition'. He notes that some supposed 'implications' are in fact not logically necessary (anaikāntika); but he does not formulate the precise conditions under which an implication is cogent'.

Nevertheless the *sūtra* already defends *arthāpatti* against the charge of being inconclusive (*ānaikāntika*); although it denies that it is an independent source of knowledge, and holds that it comes under the head of inference. Neither the sūtra nor the Bhāsya makes it clear just what form implication would take when expressed as anumāna, inference through a middle term. But the satra has no doubts as to the identity of arthapatti and anumāna: for it argues against the objector's inference ("implication is not a source of valid knowledge because it is inconclusive ''), that, if implication is invalid, then this inference is itself invalid; while, if the inference is valid, then implication is valid: the meaning of the dilemma being that the validity of inference stands or falls with the validity of implication—since in fact there is no distinction between implication and inference. Neither the sūtra nor the Bhāsya recognises the distinct tion, first made perhaps by some Mīmāmsaka predecessor of Sabara (unless Sabara himself originated the doctrine), between verbal implication (śrutārthāpatti) and real implication (drstārthāpatti). Praśastapāda recognises it, but regards it as of little importance.

All implication is within a system, and therefore relational. Vātsyāyana takes his example from the

¹Indian Logic never developed the sort of doctrines which we class as 'formal'; and its omission to concern itself with the 'opposition of propositions', in our sense, is a case in point.

causal relation, Sabara takes his from spatial relations (if a man is not here, he is elsewhere), while the later Mīmāmsaka adds one based on time—if not now, at another time. All three illustrations can easily present themselves as a mere opposition between positive and negative—between this and not-this; for the reason that a system is a whole of mutually exclusive parts, and can always be expressed disjunctively. This aspect of the relational argument is present to Vatsyavana when he characterises the argument as based on pratyanīkabhāva. or opposition: and when he says the positive is the pratyanīka of the negative he lapses into a 'formal' view of 'implication.'. Sabara and his school, partly at least, avoid this tendency to a formal account, because they think of the system of facts as forcing upon the mind a point of view which is not merely the negative of the impossible supposition but a positive conception in itself. Nevertheless they do not succeed in realizing the constructive or 'synthetic' character which is the mark of a genuine arthāpatti—as exemplified for example geometrical construction, in which new positive truth arthad apadyate—arises by implication in the concrete character of a system1.

Praśastapāda

Praśastapāda does not seem to accept Vātsyāyana's account of arthāpatti; and he draws the distinction, which Vātsyāyana does not draw, between dṛṣṭārthāpatti and śrutārthapātti. His actual words, however, do not enable

[&]quot;Faddegon suggests, what seems very probable, that arthāpatti originally "was a notion due to the exigencies of exegesis. Where a literal explanation of the text was not possible, one had to go back (āpadyate) to the meaning or intention of the speaker (artha). Arthāpatti thus signified... "reading between the lines". Later on, arthāpatti got a wider meaning; only the śrutārthāpatti was a remnaut of the old use of the term". Vaišesika System p. 478 footnote.

us to determine what view of arthāpatti lie has in mind. But, for reasons suggested below, it is probable that Śrīdhara interprets him correctly.

PBh p.223 l.1. "Implication from an object of experience is no more than inference by opposition (rirodhy era sc. anumānam): implication from what is heard is inference from the inferred."

Comment. (a) dṛṣṭārthāpatti

Srīdhara glosses virodhy anumānam by: "pramāṇāntaraviruddha evārtho 'rthāntarāvinābhūta iti virodhy eva lingam '—' a thing which when contradicted by some other means of knowledge is inseparably connected with another thing is a 'Mark by contradiction' '.' Absence from the house, when contradicted by knowledge that the man is alive, is inseparably connected with, and therefore is the Mark of, being outside the house. Sridhara takes the reference to be to some such view of arthāpatti as Sabara's.

It is a case of inference, anumāna, because it clearly relies on avinābhāva, universal connection. 'yasya yathā niyamas, tasya tathaira lingatram', says Srīdhara: "there is a middle term (i.e. the process is inference or anumāna), just so far as there is a rule of necessary connection ". " If absence in the house caused the thought of presence outside simply through the impossibility of the former alternative (anupapattimātrena), it would not be a middle term based on a universal rule (nivamahetu) and therefore the absence from the house might lead to the thought of something else too (arthantaram api kalpayet—i.e. it would not point to any definite alternative)". The Mīmāmsaka says that knowledge of absence from the house generates the idea of something else in order to make itself possible (svotpattage)—and it. is not possible on any other hypothesis except that of the man's being outside (anyasmin kalpite na tasyopapattih). But on what authority (kena) does he affirm that a living man's absence from the house is only possible in case he is outside? On the authority of the experience that a finite substance if it is in one place is not anywhere else. But then the realisation of the possibility of the man's absence from the house has as its condition a positive connection (anvaya), and so is inferential, since its arising depends on a universal connection. The form of the argument would be: 'Devadatta is out, because being alive he is not seen in the house: like me'.

—There is no question that the process is 'inferential' in the sense of depending on a universal. The question is whether it can be 'reduced to syllogistic form': and since the Indian syllogism is in essence inference from examples this really amounts to asking whether arthāpatti can be represented (fairly) as inference from examples: and the obvious irrelevance of the example in Sridhara's attempt at reduction to syllogistic form indicates, that it cannot be done. Arthapatti is not inference from examples.—Western logic meets with similar difficulties in attempting to reduce relational arguments to terms of our syllogism: we cannot easily construct a premise stating explicitly the universal from which the conclusion could be supposed to be 'deduced'; and the premises as they stand present a quaternio terminorum: as for instance in such arguments as 'A is to the right of B, and B to the right of C, therefore A is to the right Indian logic in its doctrine of arthāpatti is facing this same problem, though from a different angle.

^{&#}x27;The above is the substance of what Srīdhara says on dṛṣṭārthāpatti, NK 'p. 223 ll. 3—16. One or two sentences remain unintelligible to me—I have omitted them. Faddegon's translation of the passage at pp. 479-480 is confused.

The argument (in the last sentence of the above) is in the affirmative ianvayin) form. The Naiyāyika tradition makes arthāpatti a kevalavyatire'ti anamāna, e.g. Tarkabhāsā pp. 80-81: the form being "Devadatta eats by night; because he is fat without eating by day; those who do not eat by night are not fat-without-eating-by-day; like so-and-so who eats neither by day nor night and is thin; not so Devadatta, etc."

The Indian syllogism from example does not differ in essentials from the Western syllogism. Both are subsumptive. And the fact is that there are important classes of inference which are not subsumptive, and therefore refuse reduction to syllogistic form, or to anumāna. Indian logic gives a few illustrations of such arguments under the rubric of arthāpatti. The treatment of the topic is inadequate: but it is still a valuable suggestion.

(b) śrutārthāpatti

Praśastapāda's meaning in calling verbal implication anumitānumāna is merely that verbal testimony is itself (on his showing) inference. The facts derived by 'implication' from words are arrived at inferentially: therefore the 'implication' got from such facts is 'inference from the inferred'.

(v) Sambhava—Inclusion

PBh p.225 1.10 "Inclusion also is neither more nor less than inference, because it is a case of something which cannot exist without another thing (avinābhāvitvāt)".

NK ad. loc.

Srīdhara explains: "A hundred is known to exist through the knowledge that a thousand exists, as the result of a separate source of knowledge called "inclusion", which takes the form "A hundred is included in a thousand". Some people hold this view, but the author rejects it on the ground that the knowledge of a hundred from a thousand is just inference because it is conditioned by the knowledge that a hundred is inseparably connected with a thousand".

The translation of sambhava by 'probability' in this connection is a mere error. The examples given are always cases of quantitative inclusion of part in whole, and place the meaning of the term beyond doubt. Jhā on NS II. ii. 1 translates 'deduction'; but this is too wide a term Keith ILA p. 57 gives 'equivalence or inclusion': I have not met the ierm in the sense of 'equivalence'.

Vātsyāyana! gives a similar account, and, like Praśastapāda, uses the term avinābhāva in this connection: but this term was not for him, as it had become for Praśastapāda, a technical name for the universal in reasoning. Perhaps it first found its way into the language of logic in some such usage as is illustrated in this passage of the $Ny\bar{a}yabh\bar{a}sya$. "What is called inclusion is the grasping of the existence of another thing as the result of grasping the existence of a thing which is its $avin\bar{a}bh\bar{a}vin$, i.e. does not exist without it. For instance we apprehend the existence of an $\bar{a}dhaka$ (a weight which is the quarter of a drona) from apprehending the existence of an $\bar{a}dhaka$ (which is the quarter of an $\bar{a}dhaka$) from apprehending the existence of an $\bar{a}dhaka$ ". And again:—

"A quantity and its constituents being united by the relation of inseparable concomitance (avinābhāvavṛttyā sambaddhayoḥ samudāyasamudāyinoḥ), the apprehension of the constituent by means of the aggregate (samudāyena) is 'inclusion': and this too (i.e. as well as arthāpatti) is just inference."

—As in the case of arthāpatti, there is a failure to generalise the particular case. The case is that of argument from quantitative relations—the case of arithmetic, if not of mathematical reasoning in general: and the question whether sambhava is a separate pramāṇa

 $^{^1}NBh$ p. 100 ll. 12—14 and p. 101 ll. 7-8 on NS II. ii. 1-2. The term sambhava occurs in both these sūtras. The reference to arthūpatti, sambhava, etc., in these sūtras is a proof that logical doctrines other than those of the $Ny\bar{a}ya$ were already in existence.

The inclusive quantity is accurately called the $avin\bar{a}bh\bar{a}vin$, as being that which cannot exist without the included quantity. The smaller of course can exist without the larger. A hundred can exist without a thousand, but a thousand cannot exist without a hundred. In 'All M is I', M is the $avin\bar{a}bh\bar{a}vin$, i.e. that which cannot exist without P. But P can exist without M.

P on the other hand is the sine qua non of M—a hundred is the sine qua non of a thousand. The sine qua non is that without which something cannot exist. The avinābhāvin is that which cannot exist without another thing: this other thing being its sine .ua non.

is in fact the important question whether arithmetical reasoning is deductive in the sense of being sillogistic. Indian logic did not grasp the fundamental character of the problem,—neither did Western logic, until Kant pointed it out. Western formalism is in a more awkward predicament than Indian here in view of its quantitative treatment of the syllogism. Both the Western and the Indian formalist would reduce arithmetical reasoning to syllogistic form. But the Western formalist at the same time reduces the syllogism to a kind of arithmetic¹.

(vi) Abhāva. Non-existence or negation.

It is clear from the discussion in the Nyāya Sūtra² that the investigation of the nature of non-existence (abhāva) arose out of a dialectical difficulty—How can we know that which is not? or, How can we assert that anything is not? It is, as we should perhaps say, the problem of how a negative judgment is possible. Sabara gives no sign of being aware of any difficulty: but the position which he takes up is one out of which the dialectical difficulties stated and met in the Nyāya Sūtra would inevitably arise. He simply says abhāvo 'pi pramāṇā-bhāvo nāstīty asyārthasyāsaṃnikṛṣṭasya--'non-existence being an absence of any instrument of knowledge, is also (as well as anumāna and arthāpatti) the thought of something not present to sense—viz., of that thing (to which the pramāṇa would have applied) —in the form 'it is

¹See Note on the Indian Syllogism pp. 411-412. For tendencies to a quantitative formulation in Indian logic see pp. 280—292.

²NS II. ii. 7-12.

³Sābarabhāsya p., 10 l. 20.—For later Mīmāmsuka differences of opinion on this topic see Jhā, PSPM p. 72, and Slokavārtika, section on abhāva.

⁴Supplying kalpanā from the preceding clause.

This seems to be the force of asya.

not"". The dialectical difficulty of asserting that the absence of means of knowledge can lead to knowledge—knowledge that the thing is not—is obvious, and is precisely that raised in the Nyāya Sūtra. Kumārila interprets Sabara's statement as meaning that non-existence is the absence of any other instrument of knowledge; and draws the implication that non-existence is itself a distinct (sixth) instrument of knowledge, as being the source of negative judgments.

Nyāya Sūtra, II.ii.7—12

The Nyāya Sūtra denies that abhāva is a distinct instrument of cognition, on the ground that it is inferential (II.ii.2): but later (II.ii.7—12) asserts the validity of negative judgment as against dialectical objections. In the latter passage the objector argues that negation is invalid (na prāmāṇyam) because there is no object of cognition (prameya) corresponding—the non-existent not being a 'prameya'.—This objection springs from mere impudence (vaiyātyāt), says Vātsyāyana; for common experience provides numerous instances of 'prameya's' of negation. The following sūtra (II.ii.8) gives one such by way of example:—a number of (e.g.) pieces of cloth are marked, and a number are unmarked; someone is told to fetch the unmarked pieces, and is able to do so because the unmarked pieces become objects of cognition just from not being marked.—The objector returns to the charge with the rejoinder that what simply is not cannot even be negated (asaty arthe nābhāvah)—if there are no marks you cannot say that the cloth is unmarked: to which the answer is given that marks do exist,—in the other pieces of cloth (anyalakṣanopapatti).— The objector reforts that the negation does not refer to the

This objection supplies the motive for the erection of abhāva into a separate seventh category by the later Vaišesika and Nyāya schools, coordinate with the six positive categories of Prašastapāda and the earlier school.

marks on the marked cloths—that would involve selfcontradiction, since the marks on these cloth are present. It is impossible to say that the absence of marks on the marked cloths is the means of apprehending the unmarked cloths.—The reply is that it is not of course intended to assert the absence of the marks in the very things in which the marks are present. But the absence is apprehended relatively to the things in which the mark is present (lakṣaṇāvasthitāpekṣāsiddheḥ).—The final sūtra (II.ii.12) adds a further argument for the validity of the negative judgment, namely, that before a thing comes to be it is not. This argument rightly connects negation with becoming: it is impossible to conceive of 'becoming' without the notions of 'not yet' (antecedent non-existand 'no longer' (subsequent non-existence). Uddyotakara's summary judgment on nent's arguments is that they are mere quibbles (chala), which call not for refutation but rebuke: for a quibble, when witting, is ignoratio

The fourfold classification appears to be a relatively late doctrine, perhaps dating from Kumārila:—

kşīre dadhyādi yan nāsti prāgabhūvah sa ucyate nāstitā payaso dadhni pradhvamsābhāva isyate gavi yo 'śvādyabhāvas tu so 'nyonyābhāva ucyate śiraso 'vayavā nimnā vṛddhikāṭhinya-varjitāḥ. śaśaṣṛṅgādirūpeṇa so 'tyantābhūva ucyate.

^{&#}x27;In his comment on this Vātsvāvana clearly chunciates a twofold division of abhāva into antecedent and subsequent non-existence: but he makes no mention of the other varieties recognised by the later school. 'Abhāvadvaitam khalu bhavati, prāk cotpatter avidyamānatā, utpannasya cātmano hānād avidyamānatā''.

[&]quot;The non-existence of curds in the milk is antecedent non-existence; the non-existence of milk in curds is subsequent non-existence or non-existence after destruction; the negation of horse in the cow is mutual or reciprocal negation; absence on the slope of the head of hardness and excrescence is absolute non-existence—non-existence of such things as the horns of a hare." (Slokavārtika, abhāva, 2—4).

Still later, the three varieties 'antecedent', 'subsequent' and 'absolute' were classed together under the general head of samsargābhāva; the common element in these three being apparently the temporal reference in 'not yet', 'no longer' and 'never' (for atyantābhāva is explained as traikālikābhāva, non-existence in past, present and future). 'Reciprocal non-existence' is a denjal of in tity (tādātmuapratiyogikābhāva), without any temporal reference. See TB pp. 146—148.

elenchi (arthantara)¹; and, when unwitting, only shows the ignorance of the person who employs it. But this is hardly fair: for what the opponent has urged is a genuine dialectical difficulty.

Nyāya Sūtra II.ii.2, and Vātsyāyana

As regards the earlier passage (II.ii.2) the question arises—On what grounds does the sūtrakāra reduce 'nonexistence ' to inference? No answer is to be found in the sūtras themselves, and we have to rely on Vātsyāyana's comment². But what he says strikes us as irrelevant; for he does not attempt to answer the question which we expect him to answer—the question how we know that a thing is not. Instead of dealing with this question, he gives an example to show that, given the knowledge that something is not, we can then use this knowledge as a means of apprehending that something else is. And he has no difficulty in showing that, when abhāva, non-existence, is in this sense a pramāna, i.e. a means of apprehending something, it is simply an inferential process. "Absence or non-existence (as a praopposition³. māna) depends an That which on not is the means of apprehending that which (abhūtam bhūtasya sc. pratipādakam)—non-existent rainfall causes us to apprehend an existent conjunction of wind and cloud, on the ground that where there is a restraining conjunction of wind and cloud the falling of the rainwater as the result of gravity does not take place." And again: "An opposition being established

^{&#}x27;Jhā, Translation, Vol. II p. 316. NV p. 179 ll. 7—10, and p. 282 °ll. 16—19. On these technicalities see the next chapter on Sophistical Refutations.

²NBh p. 100 ll. 15—17, and p. 101 ll. 8-9.

abhāvo virodhī. This is comparable with Prasastapāda's account of arthāpatti as virodhy anumānam. I suspect that Prasastapāda has this passage of the Nyāyabhāsya in view, and is deliberately amending Vātsyāyana's teaching. He means to say that what Vātsyāyana calls abhāva is in fact arthāpatti.

in the form 'where this is, that does not happen', we infer through the non-occurrence of the effect the existence of something which counteracts the cause l'(kāraṇasya pratibandhakam)''.

$Pra\'s astap\~ada$

Praśastapāda's brief statement shows that he takes almost the same view of non-existence, considered as a means of apprehension (abhāvapramāṇa), as Vātsyāyana does; but with this difference, that he identifies it with inference from absence of effect to absence of cause, whereas Vātsyāyana identifies it with inference from absence of effect to presence of a counteracting cause.

As a contribution to the real problem of negation, as conceived by the *Mīmāmsakas* and the later *Naiyā-yikas* and *Vaiścṣikas*,—the problem, How do we know that which is *not?*—Praśastapāda's teaching is thus as irrelevant as Vātsyāyana's. He says:—

PBh p.225 ll.1415.
"Non-existence also is neither more nor less than an instrument of inference (anumānam eva). Just as the

occurrence of an effect is the inferential Mark in the apprehension of the presence of the cause, so the non-occurrence of the effect is the inferential Mark in the apprehension of the absence of the cause."

Śrīdhara

Srīdhara ignores Praśastapāda's account, and proceeds to deal with the real problem in a long and valuable polemical digression². He points out that even those

 2NK pp. 225—230. The first part deals with $abh\bar{a}va$ as a $pram\bar{a}ua$, the second part with $abh\bar{a}va$ as a category. That is, he deals with two

This difference confirms the suggestion made in the preceding footnote. If the inference through opposition (virodhy anumānam), to a counteracting cause, is to be classed as 'presumption' (arthāpatti), the inference through non-existence (abhāva) has to be differentiated from it. The differentia is that the former infers a positive entity, the latter a negation.

who assert that $abh\bar{a}va$ is a distinct instrument of cognition have to qualify the assertion by adding that the thing thus beginsed as absent must be such a thing as is capable of being perceived if present; and that the conditions of perceiving it must be present. But this at once introduces an inferential element into the apprehension of non-existence,—the middle term being the fact that the thing is not perceived (anupalabdhi in the Buddhist terminology: but Srīdhara uses $abh\bar{a}va$ as synonymous with anupalabdhi). The 'major premise' is the universal connection between non-perception of an object capable of being perceived (yogya) and its non-existence.

But what of this 'fact that the thing is not perceived'? 'For instance when there is no pot on the floor—the floor is *perceived* as present. Why not say that the jar is *perceived* as absent²? That is, why not class negative apprehension as a case of perception, instead of calling it inference?

—Well, perception is defined as apprehension arising from contact of sense and object: and there is an obvious difficulty in conceiving of contact of the senses with an absent object. You may reply that whether an object can or cannot be in contact with sense can only be decided by the result: and since we do perceive absence we must conclude that there is somehow contact of sense with the

problems: (a) How do we know the non-existent? and (b) In what sense is non-existence or negation an aspect of reality?

Both parts are translated by Faddegon pp. 483-492.

¹Cf. the formulation of inference through non-perception (anupalabdhi) by Dharmakīrti in the Nyāyabindu p. 110—yat sad upalabdhilakṣaṇa-prāptam tad upalabhyata evety ukte 'nupalabhyamānam tādṛṣam aṣad. See Note on the Indian Syllogism in Mind XXXIII N.S. 132 (Oct., 1924), pp. 399-400, footnote. Srīdhara (NK. p. 226 ll. 1—3) savs: ''uoqyānu-palambho jūeyābhāvam na vyabhicarati, ayoqyānu-palambhūs tu vuabhicarati, saty api jūeye tasya sambhavād. . . . Evam saty abhāvo lingam eva ṣyād, avinābhāvagrahanasāpekṣatvāt.''

Srīdhara's yogya is Dharmakīrti's upalabdhilakṣaṇaprāpta.

²This is the later Naiyāyika view. Hitherto he has been arguing gainst the Mīmāmsakas.

absent as absent. But the truth is that every negation or absence has a definite locus (adhikarana): and that, whereas the sense is in contact with the locks and functions in the apprehension of the locus, it does not function in the apprehension of the absence: as is shown by those cases where we are subsequently asked 'Was so-andso there?', and we then (i.e. when sense is no longer functioning) apprehend his absence. Nor can this be a case of memory; for we remember what we have previously experienced: but the absence now apprehended was not apprehended before. Nor are the difficulties any less for those who, admitting that absence cannot be apprehended by perception, urge that the absence of the object is apprehended by the absence of apprehension through any of the five instruments of apprehension (perception, etc.): which proves (as they hold) that absence (abhāva), or non-apprehension, is a distinct instrument of apprehension $(pram\bar{a}n\bar{a}ntara)^2$. For, in the case above instanced of realising subsequently that so-and-so was not present,—is the 'non-apprehension' which (according to this account) establishes his absence, a present non-perception establishing a present absence, or a past non-perception establishing a past absence? present non-perception would not be 'non-perception of a thing capable of being perceived' (yogyānupalabdhi), for the scene of the absence is now remote; besides the apprehension that 'he is not there' may now be wrong, for he may have gone there in the meantime. A past nonapprehension, on the other hand, which alone is capable of determining past non-existence, has ceased to exist at the present—another state of mind has taken its place: and a non-existent mental process cannot be a cause of

The $M\bar{\imath}m\bar{a}msaltus$, again. The passage which follows (NK p. 227 from 1. 2=Faddegon pp. 486 and 487) is difficult, and Faddegon's otherwise adequate translation of this section is in part confused here.

²Cf. the statement of Sabara cited above, p. 328.

apprehension. Nor, can the past non-apprehension befunctioning now as recalled by memory, for the following reasons.—The opponent's doctrine is that the non-perception cannot be brought to consciousness by any other of the instruments of apprehension because it is a mere negation,—and if you suppose another 'non-apprehension' to be the means of apprehending the first 'non-apprehension' you land yourself in a regressus ad infinitum: and therefore non-apprehension must be thought of as determining its object without itself being apprehended, as is the case with the organs of sense?. 'This being the opponent's view, it is impossible that there should now be memory of the past non-apprehension, seeing that it was not experienced when it was present: and there can be memory only of what was previously experienced.

 $^{^1\}mathrm{Accepting}$ Faddegon's emendation (p. 486 footnote 3) na cāvidyamānā pratītih kāraṇam khavitum arhati (text reads avidyamānāpratītikāraṇam). NK p. 227 l. 10.

The instruments of apprehension are of two kinds: first, those which are instrumental to knowledge without themselves being known—as the organ of vision is instrumental to perception without our making it an object of apprehension: secondly, those which are instrumental to further knowledge through being themselves known—like the middle term of an inference. (This classification of pramānas is given by Vācaspati Miśra, and is evidence of the vague character of the Indian conception of pramāna. It is clear from this that pramāna cannot be rendered 'proof'.)

^{*}At this point the opponent suggests that the past 'non-apprehension' may be regarded as still continuing in the mind, on the ground' that non-apprehension of an object only ceases when the object is apprehended. And as for the objection previously raised that a different state of mind has now supervened, there is no ground for supposing that a difference in the state of mind must imply a difference in the thing apprehended (?).—Srīdhara replies that this suggestion is perhaps possible in the case under consideration, i.e. the case of a person who is asked 'Was X present', and who then realises that X was absent. But how will the opponent deal with that pratīkārah, as rightly read by Faddegon) a case in which the absence is at first not grasped owing to the fact that memory did not bring up the idea of the absent thing (pratiyogin), but is realised subsequently as the result of apprehension ceases owing to the present apprehension! The opponent cannot say that there was non-apprehension before, and that this, though the longer existing, is the cause of the knowledge of absence—unless he is propared to admit that a man can still see after he has lost his sight!—Perhaps the will say that present non-apprehension is put an end to by the present

Sridhara concludes that the process by which we afterwards apprehend that a thing was absent (like the process by which we now apprehend that a thing is absent) is inference. "What would have been rememabsent) is inference. bered when another thing is remembered, and yet is not remembered, although the desire to remember is present, was absent at the time of the original experience. and-so is not remembered at such-and-such a place which is remembered, although the desire to remember is present. Therefore so-and-so was absent ".—If it be objected that such an inference is doubtful (anaikāntika) because we sometimes cannot call to mind something which as a matter of fact was present and formed part of the original experience—as when we remember one verse of a couplet but fail to recall the other—, we shall add to our 'major premise' the proviso 'the aggregate of conditions for recall being the same in both cases' (tulyasāmagrīkatva). In the case of the two verses of the couplet the conditions are not the same, there having been a keener mental impression (patutarah samskārah) produced by the verse which is remembered. But where the two things were factors in a single cognition (ckajñānasamsarqi) as in the case under consideration, this proviso is necessarily satisfied: the aggregate of conditions in the apprehension of one was identical with the aggregate of

apprehension, but that the past non-apprehension still subsists and that it is by this, which alone is fitted to determine a non-existence belonging to past time, that the thing's absence on the previous occasion is determined.— The suggestion betrays remarkable knowledge and insight! Non-apprehension is 'antecedent absence' (prāgabhāva) of apprehension, and as such has its termination in apprehension, and is one and indivisible, not to be distinguished by temporal differences into 'past non-apprehension' and 'prosent non-apprehension'. The exceeding subtlety of the distinction involved in saying that the present non-apprehension comes to a stop while the past non-apprehension subsists is of a kind only to be appreciated by persons who (like the opponent) have wits as sharp as the point of a blade of kusygrass (kusāgrīyabuddni)!

This passage (NK p. 227 ll. 14—25) was not worth embodying in the above summary of Sridhara's argument, but is given as a sample of tentile century polemics.

conditions in the apprehension of the other: and so the aggregate of conditions for recall will be identical.—The case of recalling verses is different, because the original apprehension of them was not unitary but successive (kramena pathyante naikajñānasamsargīṇi.)¹

—Here, as always, it is necessary to distinguish the two senses of pramāṇa, as mere instrument of cognition (psychological) on the one hand, and as ground of belief (logical) on the other hand. In the latter sense Sridhara may be thought to prove his point; for the setting out of the logical grounds for belief in a negative judgment will take the form of an inference. 'How do I know that it is absent? because if it had been present I should have seen it, or remembered it'. There will always be, however (though Śrīdhara will not admit it) a logical possibility of error in the inference, since it is impossible so to formulate the 'major premise' as to exclude all possibility of exception². Practical or moral certainty (i.e. opinion that a wise man will act on) can be achieved; but logical certitude in the concrete is an idol of the theatre.—But, apart from this objection, Sridhara's argument proves too much: for the ground of our belief in perception³ (which is admitted to be an independent pramāna) is no less inferential than the ground of our belief in 'non-apprehension' (which is denied to be an independent pramāna). We may support our positive perceptual judgments by arguing 'if it were not there, I should not see it', no less than we support our negative judgments by arguing 'if it were there, I should see it'.

^{&#}x27;The psychology is wrong; but the distinction between 'simultaneous' and 'successive' association is noteworthy.

The normal man fails to see what is before his eyes in cases of sleight of hand. The suggestible patient cannot see what is before his eyes when he is told that it is not there. Undetected physical conditions and epsychological inhibitions may be present to invalidate the negative-judgment and the inference by which we justify our belief in it.

[•] And in memory. The Indian schools refuse the name of pramanato memory, on the ground that the original apprehension was the pramana.

Perception is no more, and no less, independent of inference than 'non-apprehension' is. And in both cases it is equally impossible to exclude the chance of error: for sometimes we see what is not there, just as sometimes we do not see what is there.

Taking pramāṇa in the psychological sense of instrument of cognition the position of those who like the later Naiyāyikas assert that we perceive absence would seem to be justified. There is a felt difference in a room from which a picture or ornament has been removed: and this felt difference is psychologically something positive, and becomes the instrument of negative judgement.

(vii) Aitihya—Tradition2

PBh p.230 1.24. "Tradition also, when true, is nothing but Credible Testimony".

When false, the question whether it is a pramāna, i.e. an instrument of valid cognition $(pram\bar{a})$ of course does not arise. When true, it is indistinguishable from śabdapramāna; and as such is reducible to inference, according to Prasastapāda. Tradition is mentioned among the claimants to the rank of pramāņa in Nyāyasūtra II.ii.1-2, and its claim is rejected as not being different from 'word '---which the $Ny\bar{a}ya$ $S\bar{u}tra$ admits as a distinct pramāṇa. The reason for distinguishing it from śabda appears to have been that tradition has no assignable author; whereas 'word' is somebody's word—so that the question whether it is the word of a reliable person (āptavacana) can be raised. Thus Vātsyāyana³ characterises tradition as having no assigned author because it has been handed down through a succession of pronouncements.

*NBh. p. 100 1. 8 iti hocur ity anirdistapravaktykam pravāda .

gāramparyam aitihyam.

¹See NScV. i. 31, where this is explicitly stated. infra. pp. 363—365

²The word is derived from iti ha, two particles. Cf. the worditihāsa meaning 'legend': the word is simply the iti ha āsa, 'and it came
to pass', with which traditional tales are introduced.

CHAPTER VI

SOPHISTICAL REFUTATIONS.

(i) Equivocation (chala).—(ii) The sophistical or dialectical refutations (jāti).
—(iii) The six steps in tu quoque dialectic (satpakṣī).—(iv) Defeat in debate (nigrahasthāna).

The three heads chala, jāti and nigrahasthāna, among the sixteen 'categories' of the Nyaya, correspond to the Sophistici Elenchi of the Aristotelian Organon. The second chapter of the first book of the sūtras distinguishes sophistry and cavilling (jalpa and $vitand\bar{a}$) from discussion $(v\bar{a}da)^1$ on the ground that the sophistical argument, though it has the form of the five-membered syllogism proper to 'discussion', uses as its means of proof equivocation (chala), sophism (jāti) and futility (nigrahasthāna): while cavilling is sophistry which makes no attempt to establish the position counter to that of the theory attacked (pratipaksasthāpanāhīna). The chapter then gives an account of Equivocation; but contents itself with barely defining Sophism and Futility, the full treatment of these two 'categories' being reserved for the last or fifth book of the sūtras, which has these for its sole topic.

SECTION 1. EQUIVOCATION.

Equivocation is defined as verbal contradiction through the possibility of taking the words in an alternative sense. It is divided into three kinds, equivocation in respect of words, equivocation arising from a common term, and equivocation about a metaphorical expression.

¹Cf. Plato, Resp., 539 B. and C., where discussion is contrasted with refutation and contradiction.

1. Vākchala

Equivocation in respect of words is defined in the sūtra as the supposition of something different from that intended by the speaker in the case of a thing named by a homonym. Vātsyāyana cites as an example the sent-ence navakambalo 'yam māṇavakaḥ, by which the speaker means "this man has a new blanket "(navaḥ kambalaḥ). But though in the resolution of the compound the meaning is unambiguous, the compound navakambala is itself ambiguous (vigrahe tu viśeṣo, na samāse), and the opponent unfairly resolves it as nava kambalāḥ, taking it to mean "this man has nine blankets": unfairly, because no word, as such, is particular in its meaning; which becomes determinate only through the context (arthaprakaraṇādisahakārī viśeṣe vartate), Vācaspati explains.

2. Sāmānyachala.

This is defined as the supposition of an impossible meaning, resulting from the application, to the thing that is meant by the speaker, of a common or class character which covers more than the thing meant. For example, the statement "this Brahman is learned" is unfairly taken to imply that any Brahman (including ignorant ones) is learned: unfairly, because it makes the unwarranted assumption that Brahmanhood was mentioned as causally connected with the possession of learning; whereas in fact the speaker used the term Brahman simply in explanation of the thing referred to (viṣayānu-vāda) without any intention to speak of the cause (avivak-ṣitahetukasya).

The trick here consists in taking a reference to attendant and accidental circumstances as a statement of something essential.

,3. Upacārachala

The critic takes in its literal sense, and so is able to deny, a statement which the speaker obviously intends in a figurative sense. The example given is "the platforms shout", which of course is used in the sense "the people on the platforms shout". The term 'platforms' is intended in the secondary sense and understood in the literal sense (bhaktyā prayoge prādhānyena kalpanam. NBh p.57 ll. 15-16). The procedure is futile because unless you contradict the speaker's words in the sense in which he intends them you are not contradicting him at all.

The first and third of these are plainly fallacies in dictione. The second is equally so, though less plainly: for it turns on a deliberate misunderstanding of the structure of the sentence: for a sentence which is obviously intended to be constructed "this man—the Brahman—is learned", is construed into the form "this man, being a Brahman, is learned". It is therefore rightly classed as a case of chala, i.e. fallacy in dictione. It can be brought under the rubric of amphiboly, in the Aristotelian classification of the fallacies in dictione.

SECTION 2. THE SOPHISTICAL OR DIALECTICAL REFUTATIONS $(J\bar{J}T\bar{J}T)$

The definition is given by anticipation at I.ii.18—sādharmyavaidharmyābhyām pratyavasthānam jātiḥ,—'the jāti is a counter-argument through likeness and difference'. Of course, on the Naiyāyika theory of inference, strictly logical arguments also proceed through likeness and difference. What differentiates the dialectic devices to which the common designation jāti is given, 'is the nature of the likenesses and differences on which

these dialectic semblances of logical demonstration rely. Vātsyāyana says on this $s\bar{u}tra:$ —

"The dialectical consequences which are generated when a logical reason is employed are called jāti (prayukte hi hetau yaḥ prasango jāyate, sa jātiḥ). Where the reason is 'a proof of the probandum from likeness to the example' (NS I.i.34), the jāti is a counter-argument relying on some unlikeness to the example. Where the reason is 'a proof of the probandum from unlikeness to the example' (NS I.i.35), the jāti is a counter-argument through likeness to the example. A jāti is thus something generated from opposition (pratyanīkabhāvāj jāyamāno 'rtho jātir iti).

The last $s\bar{u}tra$ of the first book states that there are many kinds of $j\bar{u}ti$, and of $nigrahasth\bar{u}na$, arising from the variety of likenesses and differences which may serve as the ground of dialectical demurrers $(j\bar{u}ti)$, and from the various sorts of misunderstanding and failure to understand which constitute futility $(nigrahasth\bar{u}na)$. But, contrary to the usual practise of the first book, no enumeration or division of these two 'categories' is here given. On the other hand, when we come to the fifth book which treats of the varieties of $j\bar{u}ti$ and $nigrahasth\bar{u}na$, we do get a division of $j\bar{u}ti$'s (V.i.1) and a division of $nigrahasth\bar{u}na$'s (V.ii.1), followed in each case by a series of definitions of the different kinds of each. And these two series of definitions constitute the whole of the two sections of the fifth book, so that the book reverts to

^{&#}x27;Vātsyāyana clearly suggests an etymological explanation of the term jāti in the word jāyatz. But although jāti is derived from jan, there js nothing to recommend the suggestion that this particular sense of jāti means 'something generated or produced' from a logical reason.

Possibly the word jūti, general nature, comes to have the meaning of a merely dialectical argument because such arguments arise from appeal to mere generalities, which "give forth directions too much at large" to constitute a determinate reason (visesahetn) capable of leading to a determinate conclusion.

²NS I. ii. 18 tadvikalpāj jātinigrahasthānabahutvam.

enumeration and definition (uddeśa and lakṣana), which are the characteristics of the first book; though it no doubt also contains that 'investigation' or examination of concepts (parīkṣā) which characterises books II—IV¹ This might suggest a suspicion that the fifth book is a later addition. But the attempt to keep definition altogether distinct from examination is one that is bound to break down in places; and this is notably the case in dealing with, the dialectical types of argument, the treatment of which, like that of fallacies, is inevitably largely a matter of classification.

As to the postponement of the classification, the mere length of the enumeration made it almost inevitable that it should form a separate book; and the same reason would have suggested the convenience of postponing a disproportionately long treatment of two categories and of proceeding at once to the 'examination' of the other categories in the second book. There is therefore no solid ground, so far as these considerations go, for the view that the fifth book is a later addition. It has, so far, as good a claim to be treated as an integral part of the early system as any of the other books.

Nor does it seem to be true that the topic is a relatively unimportant one, which need have formed no essential part of the original system, but may rather be regarded as the product of a subsequent scholasticism. The truth rather is that it was very necessary at the outset to settle what was fair argument and what was not, and that the topic lost its importance for the later schools just because the system had from the outset dealt so thoroughly with sophistical opponents that its account of the matter was embodied even in the subsequent logic of

^{• &#}x27;See Jhā, Translation, Vol. iv. p. 279, footnote. He states that the Pariśuddhi discusses the question whether the subject of the fifth book is definition or examination, and that Udayana decides that it is definition. He also cites the reasons given by Vacaspati for the postponement of the treatment of iāti and nigrahasthāna. They are perfectly good reasons.

those very opponents—that is to say the Buddhists against whose methods we may perhaps conjecture that the fifth book of the Nyāyasūtra was largely directed. Aristotle devotes as much space proportionately to the Sophistici Elenchi¹ as the Nyāyasūtra does to the doctrine of jāti and nigrahasthāna; and if we are to condemn the latter as serious trifling we cannot exempt Aristotle's treatise from the same condemnation. But the fact that in both systems of logic² we are confronted with the same phenomenon of a careful attention to mere sophistry would seem to indicate that in the beginnings of systematic logic (at any rate in a social environment in which inordinate importance was attached to even a rhetorical success in debate, as was the case in ancient Greece and India) the exposure of the sophistical method was a serious task³.

The names of all the twenty-four jāti's end in the word sama, which denotes equality or 'parity', and seems to signify that the defendant's reasoning (sthāpanāhetu) is equalised or counter-balanced by a parallel dialectical semblance of proof. The names may usually be translated 'the counter-argument by . . . ',

I do not mention the *Topics*, because Indian Logic did not develop a doctrine of dialectical argument from 'common places',—as opposed to logic proper on the one hand and to sophistic on the other. It is true that the *Nyāyasūtra* advocates the use of sophistry and wrangling for the defence of truth likening it to the hedge of thorns with which we protect the young shoots (*NS* IV. ii. 50). But this is incidental, and only means that you should be able to use your enemy's weapons. It is nowhere suggested that the use of dialectical arguments is intrinsically justifiable as leading to probable conclusions where demonstration is not available.

²There is nothing to show that the parallelism between the systems is due to historical contact. There is general likeness between the Sophistica Elenchi and the fifth book of the $Ny\bar{a}yas\bar{u}tra$. But this sort of thing is not evidence of connection.

³Cf. H. W. B. Joseph, Introduction to Logic, (2nd edn., Oxford, 1916) pp. 586-587. See also page 368 infra.

⁴As translated by Jhā.

e.g. 'the counter-argument by similarity', and so on. The whole list is as follows:—

NS. V.i.1.

1.	sādharmya-sama	13.	anutpatti—
$\cdot 2.$	vaidharmya—	14.	sanisaya—
3.	utkarṣa—	15.	prakarana¹—
4.	apakarṣa—	16.	ahetu—
5.	varņya—	17.	arthāpatti—
6.	avamya	18.	aviśeṣa—
7.	vikalpa—	19.	upapatti—
8.	$s\bar{a}dhya^{1}$ —	20.	upalabdhi—*
9.	prāpti	21.	anupalabdhi—
10.	aprāpti—	22.	anitya—
11.	prasanga—	23.	nitya—
12.	pratidṛṣṭānta—	24.	kārya—

That is to say, the sophist or dialectician $(j\bar{a}ti \cdot v\bar{a}din)$ may give the appearance of a refutation $(d\bar{u}san\bar{a}bh\bar{a}sa)$ of even a valid argument by the use of one of these 24 dialectical devices²:—

- 1. He may produce an irrelevant *likeness* to non-P,
- 2. or an irrelevant difference from P.
- 3. He may add to S qualities possessed by P's which are not proved by M,
- 4. or *subtract* from S qualities which it possesses but which are not possessed by P's.
- 5. He may argue that since P as the thing to be proved is to be shown in S, it is equally to be shown in the evidential cases adduced,
- 6. or that if P is not to be shown in the evidential cases, it is equally not to be shown in S.

[•] 1 To be distinguished from the two types of fallacious middle term ($\hbar e t v \bar{a} b h \bar{a} s a$) which bear the same names, and are described in NS I. ii. 7.8

²For the Sanskrit names of each type see corresponding numbers in the list given above.

- 7. As M may optionally be thought of as accompanied or not accompanied by an accidental circumstance, Y, so there is an equal option of supposing M to be P and to be non-P:
- 8. Since the evidential cases are ex hypothesi like S, and since S is only doubtfully P (samdigdhasādhyavat), P being probandum,—then P is equally probandum in the evidential cases.
- 9. M and P are already *united*, so that there is no passage from M to P;
- 10. or, M and P are disunited, so that M will never prove P.
- 11. The defendant does not prove that his proof is proof, so that there is a further question to be settled,
- 12. and, if there is to be no proof that proof proves, a *counter-instance* may always be adduced (the question of its cogency will never arise, since we need not show that our so-called proof is a proof).
- 13. A cause becomes a cause by producing its effect, and therefore prior to the production of the effect the cause is no cause: and so (since effects cannot be produced in the absence of causes) there is no production of effects.
- 14. Any inference is inconclusive because any S will possess some point in common both with P's and with non-P's: and a quality which is thus common will always give rise to doubt whether S is P or non-P.
- 15. Any middle term is exposed to an antinomy and therefore only raises, without settling,

- the question-at-issue. (This means that if you can find an M which is P, you can always—e.g. under No. I—find in S another quality which is non-P. So there will always be what later logic called a satpratipakṣa, i.e. an antinomy.)
- 16. The supposed *probans-probandum* relation implies antecedence and sequence and yet is destroyed by the introduction of temporal distinctions: and so the reason given is always no reason.
- 17. Any argument carries with it an *implication* of the contradictory. If the defendant says that S is P so far as it is M, then he implies that it must be non-P so far as it is other than M.
- 18. If resemblance in a point makes things identical in another point, then there must be complete *non-difference* of all things (so far as they resemble each other at all).
- 19. It is arbitrary whether you choose M as your middle—thereby proving that S is P—or some other quality of S, such as Y—thereby proving that S is not P. Therefore the conclusion is a mere contingency (you may draw it, but you need not).
- 20. You have experience of P in the presence of M: but you sometimes have equal experience of P in the absence of M (P following from various conditions—'Plurality of Causes').
- 21. So far as an argument relies upon non-perception as proving non-existence of something, it can always be retorted that there is equal non-perception of your non-perception—

which does not therefore exist. Ergo, that which you assert to be non-existent may be existent after all.

- 22. It can be argued that everything is equally non-eternal because everything has some resemblance (e.g. in respect of existence or knowability) to such non-eternal things as a pot,
- 23. or that, since what is non-eternal is eternal in its non-eternality (truth' being eternal),
 everything is equally eternal.
- 24. Since the coming into existence of a new product cannot be distinguished from the mere manifestation of the already existent, what looks like an effect may after all not be an effect. (So that you might as well maintain, with the Sāmkhyas, the doctrine of satkāryavāda, as maintain with the Naiyāyikas the doctrine of asatkāryavāda.)

The fifth book of the Nyāyasūtra and Vātsyāyana's comment on it contain some interesting matter. The following observations deal with points of interest which are raised in connection with certain of the jātis.

Nos. 1 and 2. Parity of likeness and unlikeness go together. If a conclusion is proved Sādharmyasama and vaidharmuaaffirmatively or by likeness to the example, it will always be possible to sama. point to (a) a likeness, or (b) an unlikeness of the case in question to other well-known examples, in proof of the opposite: and similarly if the conclusion is proved negatively or by difference from the Thus let it be argued that the soul is active, because it possesses qualities which are the cause of activity, like a piece of matter. It can be retorted that (a) the soul is like ether, which is *inactive*, in respect of

being all-pervading; and that (b) it is unlike a piece of matter which is active, in respect of not being of a determinate shape. Similarly let it be argued, negatively, that the soul is inactive, because it is all-pervading, unlike a piece of matter. It can be retorted that (a) the soul is unlike ether, which is inactive, in respect of having qualities which are the cause of activity (e.g. volition, and merit-demerit); and (b) it is like a piece of matter, which is active, in respect of activity-causing qualities (which, in the case of the piece of matter, are represented, as Vācaspati points out, by conjunction with a tangible object which possesses rega, energy or velocity).

The sūtrakāra's solution of this difficulty is obscure: gotvād gosiddhivat tatsiddih (NS V.i.3),—'the conclusion (of a valid syllogism) is proved in the way in which a cow is proved, from its cow-hood''. This suggests a very sterile view of inference; and it is not as a matter of fact the sort of inference contemplated in the trividham anumānam of NS I.i.5. In any case it seems to have had no influence on the theory and practice of the Nyāya school: though the later Vaišesika school made use of merely formal inference of this sort to 'prove' that a thing is what it is because it is not other than what it is; and the habit of such demonstration by identity is a deformity in such a Vaišesika manual as the Suptapadārthī of Sivāditya.

Vātsyāyana explains the $s\bar{u}tra$ to mean that inconclusiveness $(aryavasth\bar{a})$ will be found when a proof.

¹Vātsyāyana on NS II. ii. 62 says that $j\bar{a}ti$ cannot be apprehended apart from the individual (vyakti) and the 'form' $(\bar{a}krti)$; though both he and the $s\bar{u}trak\bar{u}ra$ (NS V. i. 14) accept the doctrine that the universal (here called $s\bar{a}m\bar{a}nya$) is an object of perception (aindriyaka); and on NS II. ii. 65 he says—following the $s\bar{u}tra$ —that the $\bar{u}krti$ or determinate collocation of parts is the sign of the universal $(j\bar{u}tilinya)$, and adds that $siras\bar{u}$ $p\bar{u}dena$ $g\bar{u}n$ anuminvanti, "people infer a cow by means of its head and foot": which is not quite easy to reconcile with the present $s\bar{u}tra$. Vātsyāyana on NS II. ii. 65-66 echoes the language of the $Vaisesikas\bar{u}tra$ (as pointed out above, page 7 note) in describing $j\bar{u}t$ as $s\bar{u}m\bar{u}nyavisesa$ and characterising it as $pratyay\bar{u}nuerttinimitta$.

is proposed by mere likeness or by mere difference (sādharmyamātreṇa vaidharmyamātreṇa ca sādhya-sādhane pratijñāyamāne), but will be impossible where a peculiar character (dharmavisesa) is taken as the middle term or probans. The proof of being a cow is from that likeness to other cows which constitutes cow-hood, and not from its having a dewlap, etc. 1.

He himself refers us to that section of his comment in which he dealt with the 'Members' of syllogism. The reference is to NBh p. 45 ll.6—10, on NS I.i.39;

which may be rendered:

"When the reason and the example are correctly taken (pariśuddhi) they do not give rise to the various dialectical devices and futilities which spring from the option of a counter-argument based on likeness and un-The fact is that the dialectician's (jātivādin) counter-argument presupposes that the relation of probans and probandum in the example has not been established. If the probans-probandum relation of the two qualities, as it exists in the example, is apprehended as established, then it is a probative character that is taken as reason or middle term, and not a mere likeness nor a mere difference (sādhanabhūtasya dharmasyopādānam, na sādharmyamātrasya na vaidharmyamātrasya vā)". This is a plain statement of difference between a properly logical argument and mere dialectic: though it must be admitted that Vātsyāyana does not succeed in telling us how we are to distinguish a sādhanabhūtadharma višesahetu from a mere likeness or difference. is, he does not give us any such canon of argument as the trairūpya (see however under No. 22 infra). A justification for not telling us how proof proves is perhaps to be found in the interesting piece of Socratic

^{&#}x27;I do not see how this is to be reconciled with Vātsyāyana's own statement as cited in the preceding note. I take it that he here slips into a point of view which he did not really hold,—under the immediate necessity of finding a meaning for the sūtra.

questioning with which he replies to No. 11, the prasangasama jāti, the burden of which is to demand from the Maiyāyika the credentials of the dṛṣṭānta or probative instance on which his syllogism relies. " 'What persons take a light, and for what purpose?' 'Persons who want to see, for the purpose of seeing something that is to be seen'. 'Then why donot people who want to see a light take another light (to see the first light by)?' 'Because a light is seen without another light, and so taking a light to see a light by is useless'. 'Well, for what purpose is the example employed (in a syllogism)?' 'For the purpose of giving knowledge of something not known'. 'Then for what purpose is a statement of proof (kāranāpadeśa) required in the case of the example, if the example is something known (prajñāta) which is adduced for the purpose of giving knowledge (of what is not known. prajñāpanārtham sc. aprajñātasya)? In fact an example is defined as something in regard to which there is unanimity of lay and learned (sa khalu laukikaparīksakānām yasmin arthe buddhisāmyam, drstānta iti). Statement of proof is useless for the purpose of giving knowledge of what is so defined'. This is the answer to the prasangasama''

No. 8 $S\bar{a}dhyasa$ Parity per probandum' (Jhā) consists in attributing to the Example, not the

reason or probans, manifest in the distanta.

he present passage, in conjunction with the use of apadesa in the lists of tantrayukti's in the sense of 'pointing out a cause', appears to throw light on the use of the words apadesa and anapadesa in the Vaisesika Sūtra, in the senses of hetu and hetvābhāsa.

[&]quot;The dialectician's assertion here is, not that the particular destanta used by the defendant is defective, but that any destanta is as such defective,—kāranānapadeśāt. "because it does not declare a cause", as the sūtra puts it: or, as Vātsyāyana puts it, "because a reason is not declared; and without a reason there is no establishment (betum antarena siddhir nāsti)". That is why Vātsyāyana assigns to the second member of the syllogism the specific function of declaring probativeness (sūdhanatāvacana). Using the language of the present passage he might have said that its function is kāranāpadeša or hetvapadeša, i.e. to declare that there is a hetu, a real reason or probans, manifest in the destanta.

property P as such, but the property P as probandum,—as major term of the syllogism, i.e. as something that is to be proved. ("You say that the example has the property to be proved. But the 'property to be proved' is still to be proved, and so you cannot be certain that the example possesses it").—

If the soul is like a piece of matter, then the piece of matter is like the soul. But the soul is the sādhya, that of which the property P is to be proved. Ergo, the example resembles it in being something of which the property is to be proved. And if you say: "But the piece of matter is not like the soul in the respect of being the sādhya (= sādhyadharnin, or pakṣa) of the argument", the opponent will say "then neither is the soul like the piece of matter in the respect of being active".

The real difference between the sādhyasama hetvābhāsa¹ of Book II and the sādhyasama jāti of Book V is this, that the former is a just charge of petitio principii brought against a particular syllogism, while the latter is a mere dialectical device for bringing the same charge, unjustly, against any syllogism whatever, good or bad.

No. 14 Saniśayasama. The Naiyāyika has argued that sound is non-eternal because it follows upon

volition, like a pot. The opponent cannot show that this argument is savyabhicāra: but he says that another middle term could be taken which is savyabhicāra, and therefore generates doubt; for instance, sound is perceptible by sense,—but things perceptible by sense are sometimes eternal (as in the case of Universals)² and sometimes non-eternal (as in the case

¹For which see page 197 supra.

 $^{^{2}\}mathrm{Certainly}\,^{3}\mathrm{a}$ reference to the doctrine as taught in the $\mathit{Vaisesika}$ school.

of a pot). This creates a doubt as to whether sound is or is not eternal.

Uddyo akara points out that the difference between this sophism and No. 1, the $s\bar{a}dharmyasama$, is that the latter arises from $ekas\bar{a}dharmya$ (taking a middle term which is found with non-P, instead of with P), whereas the present dialectical device consists in taking as middle term a quality of S which is common both to P and to non-P (ubhayasādharmya).

This is a dialectical device for attributing to any argument the fallacy of savyabicāra. It is related to that fallacy just as the sādhyasama jāti and the prakaranasama jāti are related to the correspondingly named fallacies.

The next $s\bar{u}tra$ (V. i. 15) gives the obvious solution of this sophism. "Although doubt arises from a quality common (to P and non-P), there is no doubt after the character which differentiates (S from non-P) has been grasped". The $s\bar{u}tra$ is an abnormally long one and adds an argumentum ad hominem against the Bauddha who uses this piece of dialectic: "And since you do not admit the eternality of the universal you cannot contradict our argument on this ground (i.e. on the ground that sound resembles the universal, and that the universal is eternal)".

No. 15 Prakaranasama.

This is a dialectical device for attributing the prakarånsama fallacy [see p. 195]

to any argument. Since, even in the case of a valid argument, such as 'sound is non-eternal, because it is a product of volition', there will be found some quality in which the minor term (S) resembles non-P's 2 (as well as a quality in which it

³ ¹Vātsyāyana does not comment on this part of the *sūtra*. Jhā's translation seems to misunderstand it.

²As shown under No. I, sādharmyasama. Sound resembles universals (which are eternal) in being perceptible. So that sound presents the com-

resembles P's ubhayasādharmya), it can always be maintained that even a valid middle term merely 'starts a question' (prakaranam pravartayati), i.e. gives rise to an antinomy (ubhayasādharmyāt prakriyāsiddheḥ prakaraṇasamaḥ. NS. V. i. 16).

No. 16 Rejoinder that a reason is no reason (ahetusama) NS V. i. 18. Any so-called reason is just like a reason which is no reason. How so?—traikāl-yāsiddheḥ,—because the reason as such is asiddha, not established to exist, at any of

the three points of time, past, present and future.

For the reason is the probans, and it must exist either before, or after, or simultaneously with, the probandum. If before, there is as yet no probandum for the so-called probans to prove, and therefore it is not a probans. If after, since the probans does not yet exist there is nothing of which the so-called probandum is the probandum (and therefore it cannot be called probandum, and so the probans being left without a probandum is not a probans). If simultaneously, then, since both exist together, which is probans of which? and which is probandum of which? A reason, therefore, cannot be distinguished from what is not a reason (hetur ahetunā na višisyate). The ahetusama is a rejoinder based on the resemblance of a reason to what is not a reason (ahetunā sādharmyāt pratyavasthānam ahetusamaḥ).

[This sounds Buddhistic, and resembles the kind of dialectic employed by $N\bar{a}g\bar{a}rjuna$ against the validity of reasoning, in his $M\bar{a}dhyamika$ $K\bar{a}rik\bar{a}$.]

bination of perceptibility with dependence-on-volition. If perceptibility were confined to eternal things, there would be a genuine antinomy (viruddhāv)a-bhicārin, satpratipakṣa): (or, as Prasastapāda puts it, the combination of properties would be, as such, peculiar to sound (asādhāraṇa), and there would be the anadhyavasita fallacy). But of course perceptibility is not avyabhicārin with reference to characteristics.

Solution of No. 16 It is not true that the NS. V. i. 19-20. reason is not established to exist at any of the three points of time. 'How so! Because it is by a probans that any probandum is proved! And this huge perceptual universe serves as an example of the truth that there is a means of denying things that are to be denied, and a means of knowing things that are to be known. As to the query—In the absence of the probandum; of what will the probans be the probans?—the answer is that it will be the probans of whatever is to be denied or whatever is to be known.

The solution so far is simply an appeal to the fact that knowledge does exist; and therefore means of knowledge. Sutra 20 adds the obvious argumen-

tum ad hominem:-

Since your rejoinder condemns reasoning as such, contradiction also becomes impossible, and therefore you cannot contradict what you are setting out to contradict! (You have yourself given a reason for denying the validity of reasoning: therein contradicting yourself.)

No. 17 Rejoinder (årthāpattisama) NS. V. i. 21.

Implication will always by Implication convey the contradictory of any conclusion and so every argument is exposed to the arthapattisama dialectic.

Thus, if you argue that sound is non-eternal because of its likeness to non-eternal things, then from your. very statement there emerges the implication (arthād āpadyate) that, because of its likeness to cternal things, it is cternal! And as a matter of fact sound is like an eternal thing, namely, ether, in respect of being intangible (this however is urged by way of another piece of dialectic, viz. No. I, sādharmyasama It is mentioned here merely as confirming the result of the 'rejoinder by implication').

The use of arthāpatti is different from and more primitive than its use in the classical Nyāya, and the Mīmāmsā. In the Nyāya Sūtra and Ēhāsya the term means nearly what it meant in the lists of tantrayukti in Kautilya and Suśruta, viz., the verbal or semi-logical implications of a statement. When a man says 'S is P, because it is like X,' he may always be taken to imply that in so far as it is not like X it is not P. There is of course no logical necessity about such 'implication', as the Naiyā'yika points out in the solution given in the next sūtra.

Solution of No. 17 NS. V. i. 22. In the first place, if we are to read into statements meanings which are not sta-

ted, then we can read into the opponent's statement that sound is non-eternal because it resembles products, like a jar, the implication that it is eternal in so far as it resembles in respect of intangibility eternal things like ether: which of course is destructive of his thesis (pakṣahāni).

And yet we can read this implication into his statement,—just because it is not stated! In the second place, such implications from bare opposition (riparyayamātrād arthāpattiḥ) are not logically cogent but inconclusive (anaikāntika). In the statement that solid bodies fall it is surely not implied that water, which is not solid but fluid, does not fall!

No. 18 Rejoinder by Non-difference (aviścṣasama) NS. V. i. 23. One quality is found common to sound and such things as pots, and on the strength of it you infer that sound is non-different from these

things in being non-eternal.

Very well then—you expose yourself to the dialectical rejoinder that everything is non-different from everything else: because the one quality of

'existence' is found in all things: and on the strength of this we may infer that all things are non-different, i.e. identical.

Reply to No. 18 We infer another quality, viz., NS. V. i. 24. non-eternality, from the quality of 'being produced by volition'

which is common to pots, etc., and sound. But there is no other quality common to all things which has as its cause the property of 'existence', so that we could infer the 'non-difference' which is asserted.—You may say that non-eternality itself is this other property in respect of which all things are non-different. But the inference to the conclusion that all things are non-eternal could have no evidence in support of it other than the subject ('all things') itself (pratijnārthavyatiriktam anyad udāharaṇaṇ nāsti). And if there is no example a reason cannot be valid (anudāharaṇaś ca hetur nāsti). And you may not take part of your subject for an example: for that which is to be proved cannot be an example (pratijnaikadeśasya codāharaṇatvam anupapannam, na hi sādhyam udāharaṇain bhavati).

And since existent² things are both eternal and non-eternal, the conclusion that *all* things are non-eternal is impossible. Therefore the inference of the identity of everything, from existence, is a meaning-less proposition.

And if our opponent maintains that all things are non-eternal because they exist, he has admitted thereby that sound is non-eternal: and it becomes

¹That is to say the argument would come under Uddyotakara's rubric of avidyamānasapakṣavipakṣa, an argument in which neither positive nor negative evidence is available, and which is therefore invalid. It was afterwards known as the anupasamhārin fallacy.

²The true reading is supplied by the Benares 1920 edition—satas can nityānityabhāvād, etc. The Vizianagram text has tatas can etc.

impossible for him to deny this position (which he desires to deny).

The main interest of this passage is (i) the anti-cipation of later doctrines as to the necessity of examples in a valid inference—if there is neither sapakṣa nor ripakṣa there is no evidence at all, and therefore no inference. Later logicians however sometimes admitted the validity of an inference about 'everything'—e.g. all things are nameable, because they are objects of knowledge. (ii) There is a reference to the argument from the nature of the existent to its transitory character (kṣaṇikatvavāda). But the argument is so formalised in its presentment that it loses all the force which it has (for instance) as presented in the chapter on the Bauddhas in the Sarvadarśanasanigraha.—It may fairly be suspected that this often happens in this chapter on iāti; and that many of the dialectical difficulties here dealt with were much more genuine difficulties than they appear to be when presented formally as this or that jāti'.

No. 19 Rejoinder The causes of either of the by Contingency two alternatives are to be found of Cause in the subject of inference: if (Ground): or, you happen to take one you get Equal Possibilione result, and if you happen ty (upapattisate to take the other you get the ma). NS. V. i. 25. contradictory result. Thus, if you take the fact that sound is a product of volition—which is a cause or ground of non-eternality—you will infer that sound is non-eternal. But it is equally open to you to take the fact that sound is intangible—which is a cause or

The Bauddha would not wish to deny this; though the Mim ams aka would. It looks as if the dialectical opponent here were a Mim ams aka, it the text is right. But perhaps the Bauddha would wish to deny it merely because the Naiy ayika maintains it.

ground of eternality: and then you will draw the conclusion that sound is eternal. Such rejoinder through possibility of taking the ground of either conclusion (ubhayasya kāranopapattyā pratyavasthānam) constitutes "the dialectic of equal possibilities" (upapattisama).

No. 20 Rejoinder by Plurality on the fact that there is experience of Causes (upa-labdhisama) the absence of the alleged cause (nirdistakāraṇābhāve 'py upalambhād upalabdhisamaḥ). The ground

which the defendant alleges for the non-eternality of sound is that it is a product of volition. But non-eternality of sound is found also in the case of the sound made by the boughs of trees broken off by the wind—in the case of which the alleged cause of the non-eternality is not present. Upalabdhisama is the name for the retort based on the fact that we perceive the probandum-quality even in the absence of the alleged probans (nirdistasya sādhanasyābhāve 'pi sādhyadharmopalabdhyā pratyavasthānam upalabdhisamah).

Reply to No. 20 The defendant's position is NS. V. i. 28. not contradicted by the fact that that property arises from other reasons as well (kāraṇānturādapi taddharmopapatter apratisedhaḥ).—The man who argues that sound is eternal because it follows on volition means to assert that it follows from a cause, and not that the effect is restricted to this particular cause (na kāryasya

Both Uddyotakara and Vācaspati Misra felt some difficulty in distinguishing this from the prakaranasama jāti, No. 15. The difference (which both of them indicate) is simply that in No. 19 the emphasis is laid on the potentiality of an antinomy, whereas in No. 15 the actual antinomy is asserted as the basis of the rejoinder. The point in No. 19 is the arbitrariness of choosing one out of two possibilities. Nothing is said of the cogency of either possibility.

kāraṇaniyamaḥ). And he is not contradicted by showing that the non-eternality which he affirms may be deduced from another ground also.

(Of the two valid anvayavyatirekin types of inference which were recognised both by Buddhist and by Naiyāyika logic, one is that in which—as western logic would express it—the major premise is not 'simply convertible', i.e. in which all M is P, but not all P's are M. It is to this type that the present rejoinder applies. Uddyotakara's rubric for this type is sapakṣaikadeśavṛtti, and the stock example is 'sound is non-eternal because it is the product of volition, like a pot'.)

No. 21 Rejoinder (This rejoinder is directed by 'Unperceiv- against the defendant's proof ed non-percept that a thing is not present tion' (anupa-labdhisama) because he does not see it). The rejoinder to this is that "the opposite is possible, seeing that

the absence (of his non-perception of the thing) may be argued on the ground that he does not perceive his non-perception". The $s\bar{u}tra$ is involved, but there is no room for doubt as to the nature of the dialectic intended:—

- A. I do not see it, so it is not there.
- But do you perceive your non-perception of it? No. A.
- Then (by your own reasoning) your alleged non-perception does not exist: in which case the * B. thing may be there after all!

(This will amount to proving that you see what you do not see. But perhaps it is not quite so absurd as it looks. For failure to perceive may in fact be no proof that the thing was not there. Non-perception must fulfil certain conditions if it is to be a proof of absence).

In an introductory comment to this sūtra Vātsvāyana interprets this piece of dialectic as applying to the argument for the non-eternality of sound'. It carmot be said, as the Mīmāmsaka says, that sound existed even before that manifestation of it which the Naiyāyika calls the 'production' of it, but that it was not perceived on account of obstacles or impediments (āvarna) which constitute causes of non-apprehension (agrahanakārana). (as we Naiyāyikas hold) had there been such impediments they would have been perceived. But they are not perceived, and therefore do not exist." And so there is no reason to suppose that sound is not a product but existed even before it was 'manifested'.

To this argument the Rejoinder by Unperceived non-perception supplies an answer.—"The non-perception of these concealing agencies is itself not perceived, and from its not being perceived its non-existence follows: and, its non-existence being thus established, your reason for asserting the absence of the concealing agencies disappears: and, from the absence of this reason, the contrary conclusion—existence of obstacles—is confirmed. . . . This reason 'non-perception of obstacles' is countered by an equal non-perception (samayānupalabdhyā pratyavasthitah)—non-perception not only of the obstacles but also of the non-perception. And this is called anupalabdhisama."

Reply to No. 21 "The reasoning is invalid, NS. V. i. 30. because non-perception is no more than absence of perception." Anupalambhātmakatvād anupalabdh-

er ahetuh.

¹It has in fact been used by an opponent in the section on the impermanence of sound, NS II. ii. 19—21; and V. i. 30 is identical with II. ii. 21.

By failing to perceive what does not exist, you do not prove its existence! "What exists is the object of perception: and the proposition this exists" is based on perception. What does not exist is the object of non-perception, and the corresponding proposition is 'this, not being perceived, does not exist'. Now this non-perception of the non-perception of obstacles, working on its proper object, i.e. on a perception which does not exist, does not belie or contradict that object: and its object—non-perception of obstacles—being thus not belied or contradicted is competent to serve as the reason in our argument.— Obstacles, however, because they are existent things, are objects of perception, and there ought to be perception of them. That they are not perceived is due to absence of the perception which would convey the knowledge of the proper object of the perception: and as a result of the non-perception the object proper to the non-perception is conveyed to us, in the form 'there are no obstacles which would cause nonapprehension of sound'. So our non-perception is (in fact) established by the very fact that we do not perceive it (the non-perception), -in other words the absence of perception is the proper object of the nonperception of the absence of perception!"

The answer amounts to this. Non-perception is absence of perception. Therefore, as an absence, it is the appropriate object (not of perception, but) of non-perception. I expect to perceive a jar: but I expect not to perceive the absence of a jar. So I should expect to perceive a perception,—and therefore not to perceive a non-perception.—The solution of the difficulty (which is a real one) is obviously not complete: for the consciousness that something is not there is in fact not an absence of consciousness,—though it is certainly quite a different sort of consciousness from the consciousness that the thing is there.

following 'sūtra completes the solution recognising that consciousness of not perceiving is after all something more than mere absence of perceiv-

NS. V. i. 31.

"(And further the reasoning of the Rejoinder is inva-, lid) because there is a feeling within us (samvedanād adhyātmam)

of the presences and absences of the different kinds of cognition". Vātsyāyana explains:—"Within the body of embodied beings the presence and absence of the various kinds of cognition is felt (samredanīya). The consciousness 'I have a doubtful cognition' (samśayajñānam), 'I have no cognition of doubt,' is one among the various classes of cognition produced by perception, inference, testimony, and scripture². And this non-perception of obstacles, etc.,—or absence of perception—is self-felt (svasamvedya), and we say. I have no perception of obstacles to sound,' ' obstacles which would cause the non-apprehension of sound are not perceived.' The alleged contingency that 'absence of non-perception is established because we do not perceive the asserted non-perception ' cannot arise here (because we are conscious of it).

Or a cognition of doubt. In the case of knowledge of our own states the distinction between cognition in the form 'ghato 'yam asti', and cognition in the form 'ghaṭam aham jānāmi' can hardly arise: so that it does not matter how we render samšayajñānam.

²Pratyakṣānumānāgamasmṛtijňāneṣu. Smṛti might mean here, as Dr. Jhā renders it.—This is clearly intended for a common sense and not a philosophical list of the sources of knowledge. Otherwise upamana would be included. Smrti is not, for the Indian philosopher, a separate source of knowledge, if smiti means memory: though it is so for ordinary thinking.—If smiti means scriptural authority, it was onot necessary to mention it again, for it is a mere synonym of agama. (Possibly the reading is wrong, and we ought to read-opamānasmṛti.-Or else āgamasmṛti, 'testimony and scripture together as a phrase, = sabda.—The Bhūsanīya Naiyāyikas of later times did not admit upamāna. Perhaps this passage reflects an earlier tendency to ignore it.)

The interesting thing in this discussion is the account of self-awareness indicated in sūtra 31 and in the Bhāṣya thereon. The Bauddha view was that a state of mind is aware of itself (svasamvedanīya). The Mīmāmsaka held that the soul has (samvit) of its own states, but not as objects: the awareness not being parallel to knowledge, since in knowledge we are cognising objects (prameya), while in this 'awareness' we are aware of the states of consciousness as such, i.e. as subjective (samvittayaiva samvedya¹). The classical Naiyāyika view disagrees with the Bauddha, who holds that it is the state of mind that is aware of itself; and agrees with the Mīmāmsaka who maintains that the soul or self is the knower. But it differs from the Mīmāmsaka view in making 'inner perception' (mānasapratyakṣa) completely parallel with 'outer perception' (bahyendriyapratyaksa), having for objects the qualities of the soul, and having for sense-organ manas. Inner perception is thus only one kind of sense-perception, arising as it does from indriyārthasamnikarsa, contact of senseorgan and object.

In the present passage this typically $Naiy\bar{a}yika$ view of self-consciousness is ignored, and the phraseology is suggestive rather of the Bauddha or the $M\bar{\imath}$ - $m\bar{a}msaka$ view.—So far as the $s\bar{u}tra$ itself is concerned this is only to be expected; for the $s\bar{u}tra$ nowhere asserts that manas is an indriya or organ of inner perception, but on the contrary explicitly denies this in at

¹A phrase from Prabhākara quoted by Dr. Jhā in his Prābhākara School of Pūrva Mīmāmsā. Dr. Jhā however points out that the Mīmāmsaku allows that states of mind are objects of inference, though not of perception. We do not perceive them, but we may infer their existence, so that they can Decome objects of inferential knowledge.

least one passage (III. ii. 56, aindriyakatvād rūpādīnām apratisedhāh), where it is argued that cognition (buddhi) cannot belong to the body like physical qualities such as colour, because physical qualities are either perceived by a sense-organ or imperceptible, whereas cognition is perceptible but not by any sense-Vātsyāyana commenting on this says that cognition is not imperceptible, because we are conscious of it (napratyaksa samvedyatvat), but that it is not grasped by a sense-organ because it is the object of manas (nendriyagrāhyā manovisayatvāt). This is plain enough:, and there are many other passages in which he uses the language of samvitti and and none in which he speaks of mānasa-pratyakṣa. The latter doctrine is certainly a post-Bhāsya development: though the germ of it is to be found in the admission into which in one passage Vātsyāyana allows himself to be forced by the apparent logic of facts, that the sister-śāstra is right in classing manas as an indriya and that this implication is to be read into the Nyāya-sūtra itself. Dinnāga forcibly pointed out the corollaries of this admission, with the result that the later Naiyāyika school allowed itself to be hampered with the unfortunate 'internal (mānasa-pratyaksa) view of self-awareness. in its proper function of the organ of attention is of course concerned in the apprehension of our own mental processes, as it is in every other form of apprehension: and the Naiyāyika made a valuable contribution. to psychology in his insistence on this. It was very unfortunate that the school should have allowed itself to confuse its doctrine of manus by assigning it this other function as an 'inner-sense organ.

e.g. Bhāṣya on II. ii. 1-2, III. ii. 31.

²See Bhāṣya on I. i. 4, and pages 101-102 supra.

Fragment B. See above, footnote 4, page 102.

No. 22 Rejoinder parity of bynon-eternality (anityasama). NS. V. i. 32.

Since from a likeness community of property follows, the consequence will be that all things (and not merely sound) are noneternal, because all things resemble the pot, which is non-eternal.

This is, as Uddyotakara points out, merely a special application of avisesasuma, No. 18; which is a dialectical device for showing that everything can be proved of anything, so that in effect no specific proof exists.

Reply to No. 22

The opponent does not prove NS V. i. 33-34. the contradictory of the defendant's position: because (on own showing) resemblance invalidates proof. and his proof (in respect of being

normal five-membered syllogism) resembles the defendant's argument, which is asserted to be invalid'!

 $S\bar{u}tra~34.$

Further, because the son' is a quality known in the

example to stand in the relation of a probans to a probandum (sādhyasādhanabhāvena prajñātasya dharmasya hetutvāt), and because it is found in both ways (ubhayathābhāvāt), it is not true that our middle term fails to distinguish or is not specific (avisesah)."

There are two things of interest here in connection with the logic of the early school. (1) A valid hetu is a visesahetu. If a middle term fails to be 'distinctive', it is axisesa. Later on, the conclusion was reached that the distinctiveness of the valid middle consisted in exclusion from non-P: so that one of the

¹Reading with the Benares 1920 edn. sādharmyād asiddheh pratisedhāsiddhih pratisedhyasādharmyāc ca.

The Viz., text read pratisedhyasiddhih. It notes the omission of ca

as an MS variant.

Bauddha logicians, (either Vasubandhu or Dinnāga) offers as a definition of a valid middle term the phrase vipakṣād viśeṣaḥ, "that which excludes from non-P." Now the dialectical device of avisesasama—No. 18, which is identical in principle with the present jāti, consists in attempting to argue that the very principle of inference is such that there is always exclusion from non-P,—so that we can infer always that everything is P (nothing is non-P, everything is excluded from non-P). But when a differentia applies to everything, of course it ceases to be a differentia. The dialectic therefore amounts to saying that there is no such thing as a visesahetu. (2) Now in refuting this dialectical attack on inference the sūtrakāra is compelled to ask himself what constitutes the 'distinctiveness' of a hetu: and I think that in the phrase ubhayathā bhārāt he does in fact foreshadow the analysis of the 'canons of syllogism' embodied later in the trairūpya. The 'distinctiveness' of a middle term, according to the trairūpya, consists in the fact it is (a) found with P—sapakse sattvam, and (b) not found with non-P—asattvam ripakse. It must be this double relation of the middle that is meant, though not precisely formulated, in the phrase 'existing in both ways'i.e. as resident in P and as excluded from non-P. Vātsyāyana interprets the phrase by kenacit samānah kutaścia viśistah the middle term is "common to some things and excluded from others." This is a plain foreshadowing of the two 'canons' of the trairūpya referred to above; and there seems to be no doubt that Vātsyāyana is correctly interpreting the meaning of the phrase in the sūtra. He adds in further explanation that "it is a resemblance as a result of this common-ness, and a difference as a result of distinction ''-sāmānyāt sādharmyam, visesāc ca vaitharmyam.

We may therefore claim that this passage is the germ of the later syllogistic canons: and it may be that the developed art of syllogistic in India had its origin in the sort of attempt to find answers to sophistical attacks on reasoning which is embodied in the fifth chapter of the Nyāyasūtra. The sophistici elenchicame early in the order of development of logical conceptions. Out of this the syllogistic technic arose, and, having arisen, superseded the older treatment of the sophistici elenchi, which then became rather a historical survival than an essential part of logical discipline.

If this account is correct it will be a mistake to regard the fifth book of the Nyāyasūtra as a sort of serious trifling belonging to a rather later period than the rest of the sūtra. It must rather be regarded as an integral part of the first earnest attempt to distinguish good from bad reasoning, and to defend the validity of inference.

SECTION 3. THE SIX STEPS IN TU QUOQUE DIALECTIC $(\S ATPAK\S I)$

The concluding section of the first āhnika of the fifth adhyāya of the Nyāya Sūtra (NS. V. i. 39—43) points out 'for the instruction of the pupil' that a merely dialectical rejoinder to a thesis is always open to a dialectical re-rejoinder or 'tu quoque,' and this again to another tu quoque. Thus far there are four stages in the Satpakṣī,—thesis, dialectical rejoinder, tu quoque, and retorted tu quoque. The fifth step consists in the defendant's pointing out that the opponent's tu quoque (the fourth step) involves the admission that his own dialectical rejoinder (second step) is no better than the defendant's tu quoque (third step): which amounts to admitting that his

original denial of the thesis is invalid, and therefore to an admission of the validity of the thesis itself $(mat\bar{a}nuj\tilde{n}\bar{a})$. The final or sixth step consists in the opponent's retorting with another tu quoque fastening the charge of $mat\bar{a}nuj\tilde{n}\bar{a}$ on the defendant's tu quoque (third step). Thus:—

1. Thesis (paksa):

Defendant. Sound is non-eternal, because it follows after volition.

2. Rejoinder (pratisedha):

Opponent. It is not true that sound is non-eternal; for following after effort may as well mean the manifestation of a permanent thing as the production of something that comes into being and perishes.

3. Re-rejoinder (vipratisedha):

Defendant. Your rejoinder is open to NS. V. i. 39. the same retort,—for following after effort may as well mean production as manifestation. Therefore you cannot say that it is not true that sound is non-eternal. Therefore, since you have not disproved my thesis, it stands!

NS. V. i. 40. (The defendant at this point ought to have met the opponent by showing that his own thesis was based on a visesahetu. Instead of that he contents himself with saying that the absence of a visesahetu is common to both parties, to the opponent as well as to himself. The next sūtra—NS. V. i. 40, sarvatraivam, means that it is always possible for a defendant to give this sort of dialectical reply to any sort of dialectical rejoinder. But in doing so he will commit himself to the barren treadmill of the satpakṣī, which will then proceed as follows):—

4. Retort to the re-rejoinder.

Your re-rejoinder (pratise-Opponent. NS. V. i. 41. dhavipratisedha, i.e. the third step) itself commits the same

fault which it urges against my rejoinder (i.e. the second step)—the fault of inconclusiveness the second (anaikāntikatva)². That is it no more disproves my rejoinder, than (as you assert) my rejoinder disproves your thesis. Therefore, as your re-rejoinder does not contradict my rejoinder, my rejoinder stands!

5. Rejoinder to 4.

Defendant.When you say that my rerejoinder No. 3 commits the same NS. V. i. 42. fault of inconclusiveness as your own first rejoinder No. 2, you admit that your rejoinder was invalid without making any attempt to remove its invalidity: and this amounts to the futility (nigrahasthāna) called matānujñā, i.e. admission of your opponent's position.

6. Retort to 5.

In the same way you your-Opponent. self in your re-rejoinder No. 3 NS. V. i. 43. said that my rejoinder No. committed the same fault of inconclusiveness as your own original thesis No. 1,—and you thereby admitted that your thesis was faulty: which amounts to admitting my contention that your thesis was faulty. quoque, therefore! i.e. you too are guilty of the futility called matānujñā.

^{&#}x27;The Nyāyasūtravrtti reads this sūtra (V. i. 41) Pratisedhavipratistalic pratisedhado savad dosah.

The Vizianagram edn. also reads this. But the 1920 edition reads the $s\bar{u}tra$ differently in connection with the $Bh\bar{u}sya$, though in connection with the V_Itti it gives it in the above form. As connected with the $Bh\bar{u}sya$ the sūtra is given as :--

Pratisedhe vipratisedho pratisedhadosavad dosäh.

This must be a mere error; for on p. 509 l. 19, when the sūtra is cited

in the Bhāṣya, it is read in the other form.
²So the Bhāṣya.

Herewith the logic of the tu quoque comes to a natural stop, though not to a conclusion. The satpaksī is not mere trifling. It points the logical moral of the attempt to answer dialectic with the argumentum ad hominem: and it is noteworthy that the last word is left with the opponent. It forms an appropriate conclusion to Gautama's Sophistici Elenchi.

Vātsyāyana points this moral quite clearly at the "" When does the end of his comment on V. i. 43. satpaksī arise? when the discussion proceeds on the lines of 'there is the same fault in the rejoinder itself', then neither alternative is established (and then the satpaksi occurs). But when the third step is on the lines of the reply given in sūtra 38 to the kāryasama jāti,—' if sound were not a real effect but only a manifestation, volition could not be the cause of sound: for in cases where the so-called effect is a mere manifestation, there are to be found causes of the non-perception of the manifestation before it is manifested',—then it is a viśesahetu, a demonstration, that is given by the defendant in answer to the rejoinder of the opponent, and he proves his thesis that there is a coming into being of sound after volition, and not a mere manifestation: and so there is no room for the satpaksī."

The most significant result which emerges from this examination of the *satpak**si is therefore the insistence upon the necessity of a *vi**se**sahetu*, a reason which is peculiar to the *probandum* (P) and excludes the opponent's alternative (non-P). The *Naiyāyika's *vi**sahetu* corresponds' in fact to the *Aristotelian *apadeixis*. It is demonstration.

¹I do not mean that it is identical with, or even closely resembles, the Aristotelian conception of what demonstration means.

SECTION 4. DEFEAT IN DEBATE

Set debates appear to have been a feature of the ancient schools, and Vasubandhu is reported to have written three works on the principles, the expedients, and the method of debate1. The closing section of the Nyāya Sūtra is devoted to an enumeration of the circumstances in which one of disputants in such a debate is to be regarded as defeated: the twenty-two nigrahasthāna's being the different conditions under which a disputant may fairly be considered to have taken the count '2. The whole conception is of course rhetorical or eristical rather than logical; and some of the 'points of defeat' are conventional.

A disputant is considered to be defeated:— A. If he abandons, alters, gives Inconsistency.

a reason contradictory of, or denies, his own thesis; and if he shifts his ground for the conclusion (1-5).

Irrelevance and obscurity.

If he talks irrelevantly, or uses words which have no recognised meaning, or is quite obscure, or

²The seven heads under which the 22 nigrahasthānas are here grouped are Vācaspati Miśra's arrangement.

The Sanskrit names are :-

- pratijñāhāni
 pratijñāntara
- 3. pratijnāvirodha
- 4. pratijnāsamnyāsa,
- 5. hetvantara
- 6. arthantara
- 7. nirarthaki
- 8. avijnätärtha
- 9. apārthaka
- 10. aprāptakāla
- 11. nyūna 12. adhika

- 13. (a) punarukta
 - (b) punarvacana
- 14. ananubhāsaņa
- 15. ajñāna
- 16. apratibhā
- 17. viksepa
- 18. matānujñā
- 19. paryanuyojyopeksana
- 20. niranuyojyānuyoga
- 21.apasiddhānta
- 22. hetvāshāsa

¹Professional men debated as well as philosophers. Caraka in his work on Medicine has a section on debate in which he points out under what circumstances it is advisable to enter the lists, and what expedients are to be employed. No doubt Vasubandhu's lost Vādavidhi, Vadakausalya, and Vādamārga corresponded in contents with this section of the Caraka Samhitā.

uses collections of words which convey no meaning as a whole (6-9).

Want of method. C. If his syllogism is not stated in the proper order, or has not the full complement of premises or adds a superfluous reason (10—12).

Tautology. D. If he is guilty of any form of tautology (repeating the same word, or saying the same thing in other words; or saying separately what is already implied in his statement) (13a and b.)

Want of understand- E. If he cannot repeat, ing. or cannot understand, what his opponent has said, or can find nothing to say in reply, or makes obvious excuse for breaking off the debate (14—17).

- F. If his reply to the opponent's thesis admits the equal invalidity of his own thesis, if he fails to point out a clincher to which the opponent has exposed himself, or alleges one to which the opponent has not exposed himself (18—20).
- G. If he abandons the principles of the system which he is supposed to be defending; and if he uses a fallacious middle term (21 and 22).

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- Nyāyaratnākara of Pārthasārathi Miśra, a commentary on the Slokavārtika,
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Pramāṇa-samuccaya of Dinnāga. Not extant in Sanskrlt. Vidyābhūṣaṇa gives (rather different) accounts of its contents as found in the Tibetan version, in his MSIL and HIL. The Pramāṇasamuccaya is freely cited by Vācaspati Miśra in the Tātparyaṭīka. I have collected and attempted to interpret these and other fragments of Buddhist logic in my Fragments from Dinnāga. See also Tucci On the Fragments from Dinnāga. See also Tucci states that Mr. A. Iyengar is working on the edition and restoration into Sanskrit of the Pramānasamuccaya.

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 - (This is a far better introduction to the Nyāya than the better-known Tarkasamgraha. It is very lucid, follows the strict Naiyāyika arrangement, does not hurden itself with Vaišesika physics, and is free from the subtleties of the "modern" school.)
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- (8) Nyāyasūcīnibandha, q. v.

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Vaiseşikasüti... of Kanāda with

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Vidyābhūsaņa, Satīs Candra—

- (1) Indian Logic Mediaval School, Calcutta University, 1909. [A detailed account of Buddhist and Jaina logic. It is embodied in a revised form in (2), which supersedes it.]
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 - (3) See woods

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